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ABSTRACT

Adult literacy programs need reliable information about program quality and effectiveness for accountability, improvement of practice, and expansion of knowledge. Evaluation and assessment reflect fundamental beliefs about adult learners, concepts of literacy, and educational settings. Resources for planning program evaluations include surveys, handbooks, instruments, and policy studies. Evaluation issues include the following: (1) program goals and mission are subject to scrutiny and change; (2) data about teaching and learning are essential; (3) expanded outcome measures for learner progress are needed; and (4) the roles of staff, managers, learners, and external evaluators affect the evaluation process and outcomes. Four major approaches to learner assessment are considered: (1) standardized testing is norm referenced and cost effective; (2) materials-based assessment is commercially available and follows a systems management model; (3) competency-based assessment involves real-life tasks, predetermined performance standards, a continuum of difficulty, and a range of strategies; and (4) participatory assessment allows learners an active role and involves a range of texts, tasks, contexts, and strategies. Evaluation should: (1) be both external and internal; (2) be both formative and summative; (3) involve learners and staff; (4) generate design questions from theory, research, evaluation, and practice; (5) involve critical reflection on program philosophy and goals; (6) give prominence to the processes of teaching and learning; (7) capture a range of learner and program outcomes; (8) require a variety of longitudinal data collection methods; (9) be integrated with program functions; and (10) be systematic and systemic. (131 references) (SK)

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ADULT LITERACY EDUCATION: PROGRAM EVALUATION AND LEARNER ASSESSMENT

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FOREWORD

The Educational Resources Information Center Clearinghouse on Adult, Career, and Vocational Education (ERIC/ACVE) is 1 of 16 clearinghouses in a national information system that is funded by the Office of Educational Research and Improvement (OERI), U.S. Department of Education. This paper was developed to fulfill one of the functions of the clearinghouse--interpreting the literature in the ERIC database. This paper should be of interest to adult education policy makers, administrators, and researchers, as well as adult literacy program personnel.

ERIC/ACVE would like to thank Susan L. Lytle and Marcie Wolfe for their work in the preparation of this paper. Dr. Lytle is Associate Director of the Literacy Research Center at the University of Pennsylvania, where she also serves as director of the Philadelphia Writing Project and the Program in Reading/Writing/Literacy. She is directing the ongoing Adult Literacy Evaluation Project (ALEP) funded by the Philadelphia National Bank. ALEP is a collaborative project linking participatory assessment and research on adult literacy development.

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EXECUTIVE SUMMARY

Increased attention to adult literacy programs in recent years has not been accompanied by resources to support systematic evaluation of these efforts. The constituents of literacy programs--learners, administrators, staff, and sponsors--need reliable information about program quality and effectiveness in order to understand and improve the critical dimensions of service provision. Evaluation data are essential for accountability, improvement of practice, and expansion of the knowledge base on adult literacy education.

Evaluation and assessment reflect fundamental beliefs about learners, literacy, and educational settings. The design of evaluation can be shaped by addressing certain questions about these three areas, including the following.

Adults as Learners

- How is the program designed specifically for **adult** learners?
- How congruent are teachers' and learners' concepts of success?
- What roles do adult learners and staff play in setting and revising program goals?

Concepts of Literacy

- What is the program's working definition of literacy (literacy as skills, tasks, practices, critical reflection)?
- What information about the cultures, communities, and expectations of adult learners has been used to reach this definition?

Educational Contexts

- To what extent does the program's design relate to adult learning in everyday life?
- Is the program individually or community oriented?
- How does the program provide opportunities for teachers to expand their instructional repertoires?

Resources for planning program evaluations include program surveys, handbooks, instruments, and policy studies. Representative evaluations of volunteer programs, statewide adult basic education, community-based programs, technology-oriented programs, and workplace approaches illustrate some of the issues involved: (1) program goals and mission are subject to scrutiny and change, (2) data on the processes of teaching and learning are essential, (3) expanded outcome measures for learner progress are needed, and (4) the roles of staff, managers, learners, and external evaluators all have an impact on the processes and outcomes of evaluation.

Four major types of approaches to learner assessment have been identified:

- Standardized testing is norm referenced, considers literacy to be reading skills, is cost effective and independent of curriculum.
- Materials-based assessment is commercially available, is related to progress in predetermined materials, and follows a systems management model.
- Competency-based assessment involves specific real-life tasks, predetermined performance standards, a continuum of difficulty, and a broad range of strategies.
- Participatory assessment views literacy as practices and critical reflection, gives learners an active role as co-investigators, and involves a range of texts, tasks, contexts, and strategies.

A framework for program evaluation and learner assessment in adult literacy education has 10 critical features:

1. Program evaluation in adult literacy education should be conducted both externally and internally.
2. Program evaluation should be both formative and summative.
3. Program evaluation and learner assessment should involve learners and staff in a participatory process.
4. Questions for the design of program evaluation should be generated from theory, research, and evaluation as well as from practice.
5. Program evaluation should involve critical reflection on program philosophy and goals.
6. Program evaluation should give prominence to the processes of teaching and learning.
7. Evaluations should be designed to capture a range of learner and program outcomes.
8. Program evaluation and learner assessment require a variety of methods for collecting data over time.

9. Evaluation and assessment should be integrated with program functions.

10. Program evaluation should be systematic and systemic, enabling stakeholders to make comparisons within and across programs and contexts.

Information on evaluation and assessment of adult literacy programs may be found in the ERIC system using the following descriptors: Adult Basic Education, Adult Educators, Adult Learning, *Adult Literacy, Competency Based Education, Educational Policy, *Evaluation Methods, *Evaluation Research, Functional Literacy, *Literacy Education, Measures (Individuals), *Program Evaluation, Reading Tests, Standardized Tests, *Student Evaluation, Student Participation. Asterisks indicate descriptors having particular relevance.

INTRODUCTION

Over the past decade, increased attention to the demand for adult literacy services has resulted in more funding for programs, in greater numbers of people participating, and in the rapid development of new sites for tutoring and classes. Libraries, community organizations, churches, unions, businesses, and corporations, to name just a few, have joined with school systems, colleges, and universities in attempting to address the diverse needs of learners in a variety of settings. Taken together, these efforts signal a strong commitment by different groups and individuals to create effective educational programs for adult learners. In this period of growth, however, there have been limited resources--and few incentives--to evaluate these efforts in a systematic way.

For the most part, adult literacy program evaluations have been conducted to respond to the needs of funders or sponsoring organizations for data relating program goals and outcomes (Lerche 1985a). Such data have typically included demographics, numbers of instructional and contact hours delivered, allocation of resources, and gains on standardized tests. State agencies funding programs through the Adult Education Act of 1988, for example, now must evaluate at least one-third of grant recipients on the basis of such data. Most programs see themselves as having few incentives, limited funds, and insufficient resources to go beyond these requirements. Only a few programs have had access to technical assistance to design and implement more sophisticated evaluation processes. Some programs have been developing their own approaches to learner assessment but in most cases, have still been required to administer tests and report progress based on a single score. Many feel that this approach does not capture much of what is learned in programs and is inadequate for providing information about program strengths or weaknesses. The problem is not just the dependence on a single indicator; in most cases, measurement of learner outcomes has substituted for more comprehensive and rigorous evaluation of whole programs. In addition, much of what has been learned by programs about successful practice has occurred informally and been used internally, so that knowledge gained has often not accrued across sites and geographical boundaries.

As a consequence, most would agree that the remarkable growth in services has not been accompanied by a parallel growth in stakeholders' knowledge or understanding of many critical dimensions of service provision and the patterns of literacy development by adults in different contexts. Stakeholders are those audiences for evaluation who have some stake or interest in the performance or outcomes of a program (Guba and Lincoln 1981). For adult literacy programs, stakeholders include those most directly involved in the program, for example, administrators, staff, and adult learners, as well as umbrella organizations--larger networks to which

literacy programs may be closely or loosely aligned (for example, Association for Community Based Education, Literacy Volunteers of America, Laubach Literacy Action, or a citywide organization), and/or sponsoring or funding organizations such as foundations, corporations, and government agencies. All of these constituencies seek information about program quality and about the ways in which existing services can be improved, and thus all would benefit from more complex and sensitive program evaluation.

Data from the evaluation of literacy programs, including assessment of learners, are essential for several purposes. The first are clearly **accountability**: demonstrating to stakeholders that programs have successfully used their resources to achieve identified outcomes. Issues of accountability have become both more complicated and more critical, in part because there is a lack of agreement in the field about common criteria for measuring success, either of programs or individual learners. The second purpose relates to the **improvement of practice**: evaluation and assessment are processes of inquiry that have the potential to identify and help address essential questions about teaching and learning, program management, and the allocation of resources. There are few structures outside programs offering professional development for adult literacy educators in these areas. Collaborative planning and implementation of strategies for evaluation and assessment can provide a context for this development within programs and strengthen networking across programs as well. Finally, the thoughtful analysis and interpretation of data from program evaluation and learner assessment can **contribute to the knowledge base on adult literacy education.** A variety of perspectives are needed to advance understanding of critical dimensions of literacy education. Some important information can come from collaboration among educators and learners within and across programs focused on issues in evaluation and assessment. Other perspectives can come from collaborations between practitioners and university-based researchers and consultants. Such collaborations can reduce the isolation of adult literacy programs from each other as well as increase their access to theory and research in the field.

This monograph is intended primarily to make accessible to adult literacy educators the current literature in the field related to program evaluation and learner assessment. In addition, this information may be of value to policy makers, funders, and researchers who are committed to improving the quality of literacy education for adults. The second chapter reviews contrasting perspectives on adults as learners, concepts of literacy, and contexts for education to suggest some of the ways in which decisions about evaluation and assessment may be informed by underlying beliefs or assumptions. In chapter 3, the current literature related to program evaluation is critically reviewed. The intent is to explore the usefulness of this literature for the design and implementation of different strategies as well as to situate learner assessment within a broader view of evaluation. Chapter 4 contrasts approaches to learner assessment currently available to suggest their distinctive contributions to the understanding of what can and should be assessed and the relative appropriateness of different methods for accomplishing different purposes. The final chapter presents a framework for relating program evaluation and learner assessment, for critiquing current efforts, and for planning new directions that address issues of accountability, the improvement of prac-

tice, and the need for a richer base of knowledge in the field.

CONTRASTING PERSPECTIVES ON ADULT LITERACY EDUCATION

Introduction

Evaluation and assessment involve formulating questions and seeking evidence in order to make judgments about the quality of programs and the accomplishments of learners. These questions, and the evidence gathered to study them, in turn depend on fundamental assumptions or beliefs about adults as learners; about the acquisition, development, and uses of literacy; and about how different educational contexts promote learning. These assumptions or beliefs have been the subject of ongoing debates and discussions among literacy educators, policy makers, and researchers interested in program design and practice, and they need to be prominent in debates and discussions about the design of program evaluation and learner assessment.

To highlight the ways in which the processes and outcomes of evaluation and assessment reflect particular beliefs about learners, literacy, and educational settings, this chapter explores some contrasting perspectives from research and practice. Although a comprehensive review of perspectives on these three areas is not within the scope of this monograph, this review is intended to invite discussion about the purposes of adult literacy education and its social and political meanings and consequences. These discussions are central to decisions about evaluation and assessment, as they challenge some assumptions and stimulate considerations of alternatives. The topics and issues included in this review are also intended to stimulate questions useful in the analysis and critique of the literature in chapters three and four.

Adults as Learners

Debates about the adults thought to be in need of literacy education center on their characteristics, intentions and goals for seeking instruction, and modes of learning. In contrast to popular perceptions, researchers argue that the characteristics of adults in need of literacy education do not necessarily fit the images of dependency, weakness, and failure depicted in media stereotypes (Fingeret 1983; Smith-Burke, Parker, and Deegan 1987). Rather, they operate within complex social networks in which they are interdependent, offering skills of their own in exchange for the literacy skills of others. Adults lacking literacy skills are therefore as varied in interests, abilities, and self-perceptions as any other group within the population. Adults are often further characterized as "suffering" from illiteracy, which in turn contributes to poverty and an array of other social hardships. Although it is true that large numbers of undereducated adults encounter many personal and economic problems, there is

little evidence that literacy alone either causes this situation or remedies it (Graff 1987; Hunter and Harman 1979).

Pervasive beliefs about the needs of adult literacy learners affect how literacy programs are conceptualized and how adults' motivations for participation are perceived (Johnston 1985). Not only do teachers' expectations of learners vary, but teachers and learners sometimes emphasize different areas of achievement. In contrast to the functional and cognitive achievements emphasized by teachers in the United Kingdom, for example, Charnley and Jones (1979) found that learners attended literacy programs in order to attain personal and social goals, such as developing better family and work relationships and participating in civic duties. In a study of North Carolina adult basic education (ABE) programs (Fingeret 1985), teachers viewed success mainly in terms of movement through the schooling hierarchy, whereas learners were found to consider success as their increased ability to apply reading, writing, and math to the demands of their daily lives and as positive changes in their relationships with family and friends. Their ability to change the circumstances of their lives, or to attempt such a change, was how they measured success. At the same time, learners also expressed "schooled" articulations of success in terms of gains in subskills and social mobility. Because data about the sources of adult motivation to achieve in school-like ways is elusive, studies that confirm adults' intention to seek their General Educational Development (GED) certificate leave some important questions unanswered.

These debates about intentions and goals are related to the current interest in work force literacy. It has become a commonplace that entry-level positions are increasingly more complex and therefore require better literacy and computational skills. Adults entering job training programs may have expectations about job mobility and opportunities for substantial changes in their life circumstances that may not be satisfied. Rather than empowering more of the disenfranchised, filling entry-level slots may serve to maintain the current distribution of power (Fingeret 1990). Furthermore, although many adult learners do seek literacy education as a route to employment or advancement in the workplace, other participants in workplace programs bring or develop a wider range of interests and goals (Darkenwald and Valentine 1984; Hikes 1988b). This situation raises questions about the breadth of curriculum in work force-related programs and the ways in which they can respond to participants' evolving concerns.

The debates about adult characteristics and motivations are related to debates about adult modes of learning. Much of this discussion stems from Knowles' (1979) theory of andragogy, which posits a set of assumptions about adult learning related to self-direction, experience and prior knowledge, immediacy and applicability of learning to roles in society, and a focus on problems rather than on subject matter. Andragogy is defined by Knowles as "the art and science of helping adults learn" (p. 8). Knowles can be credited with popularizing a view of adult development that distinguishes adults from children and with focusing attention on the learner in adult education programs.

The critique of andragogy focused initially on whether it is possible to make such sharp distinctions between how adults and children learn. Later, other critics raised questions about "whether andragogy is a learning theory, a philosophical position,

a political reality, or a set of hypotheses subject to scientific verification" (Cross 1981, p. 225). Brookfield (1986), for example, questions the assumption that adult learning is always self-directed, arguing instead that self-directedness is cultural and class-specific. One problem with andragogy as a theory of adult learning, some argue, is that it obscures the considerable diversity of adults in culture, social class, and educational opportunity.

The literature on adults as learners, briefly described, raises provocative questions for adult literacy programs. These include such issues as whether adult programs replicate relationships between teachers and learners associated with traditional schooling, whether programs attempt merely to respond to learners' expressed goals or participate in shaping them, and whether programs recognize the complex motivations that learners often bring to their decision to enroll. Further, the available literature on adults as learners does not distinguish between adult literacy and other categories of adult education. Research that focuses specifically on those adults attending literacy programs could contribute much to discussions of program philosophy, staff development, and strategies for involving adults more actively in all aspects of the program. Additional research on the spontaneous acquisition of literacy in family and community contexts (Reder 1987; Reder and Green 1985) provides other important data about literacy learning by and among adults.

Concepts of Literacy

There is little agreement in adult literacy education or in broader educational circles about what is meant by literacy. The task of defining it has become even more complex as the use of this term in a wide variety of contexts becomes more common (see, for example, Venezky, Wagner, and Ciliberti 1990). In this section many of the finer distinctions among these definitions are collapsed into four broad categories in order to highlight some of the important debates and questions related to literacy acquisition, development, and use.

Literacy as Skills

In the first conception, literacy is defined in relation to the traditions of reading instruction in K-12 schools and thus to the attainment of grade levels as indicated by performance on standardized tests. From this perspective, literacy is generally equated with decontextualized skills regarded as stable across texts and contexts. Whether or not grade levels are explicitly designated, educators working within a skills framework describe progress hierarchically and refer to learners as being at particular levels.

This model of literacy can be traced to developments in the late 19th and early 20th centuries related to group testing and to the call in the educational community at that time for scientific and objective measures of individual reading achievement. The resulting paradigm (for example, tests of silent reading and systematic analyses of oral reading errors) has persisted into present literacy education for adults as well as children. Chall (1990), for example, describes literacy as an array of skills that constitute levels of literacy achievement applicable to adult literacy programs. She considers "functional literacy" as corresponding to the fourth- to eighth-grade reading levels and as characterized by the ability to read the local paper or easier articles in magazines.

Although there is widespread critique of decontextualized skills and of reading levels applied to adult learners (Johnston 1985; Stedman and Kaestle 1987; Sticht 1990), the pervasiveness of the school model in the prior experience of most teachers, tutors, and learners makes its presence as a framework for instruction in adult literacy programs unsurprising. Even when the use of standardized tests is minimized, curriculum often implicitly reflects the belief that effective literacy instruction involves breaking reading and writing down into their component parts and teaching them sequentially. Much time and attention are often given to the processes of decoding and encoding.

The equation of literacy with reading skills is compatible with what Street (1984) calls the "autonomous model," the idea that literacy is a neutral and objective skill or set of skills independent of any specific social context or ideology. Cook-Gumperz (1986) refers to this view of literacy as singular and stratified, designed to be taught in schools as a set of universal, cognitive, and technical skills. Since adults who come to literacy programs in the United States have most often attended school as children for some period of time, the underlying assumption that programs should diagnose specific deficits and prescribe instructional remedies follows logically from people's prior experience. The hegemony of this model has many consequences, among them that literacy educators who subscribe to a whole language approach, for example, are faced with an inherent contradiction between their own view of literacy learning and learners' more traditional expectations. In such a situation, meeting learners' expectations may conflict with exercising professional judgment.

Literacy as Tasks

The view of literacy as tasks is associated with functional literacy, which in turn has a variety of interpretations. Definitions of functional literacy reflect shifting standards and emphases. One definition of this term links amounts of schooling with reading and writing attainments (Chall 1990). Sometimes functional literacy is understood as an intermediate level of fluency--more complex than the ability to read street signs or write one's name, but less than "full literacy" (Levine 1982). Other definitions have evolved from surveys of literacy attainment conducted over the last 20 years. The Harris surveys on adult functional literacy (1970-71, cited in Nafziger et al. 1975) defined degrees of literacy as performance on an array of representative daily tasks, that is, filling out forms related to specific real-world transactions indexed for difficulty (Nafziger et al. 1975; Venezky, Kaestle, and Sum 1987).

Still other definitions of functional literacy have been more relativistic. Ideological in nature, these definitions situate functional literacy within the needs and characteristics of different groups and cultures. Gray (1956, cited in Levine 1982), in a survey of reading and writing for UNESCO, originally defined it as "the acquisition of knowledge and skills in reading and writing which enable one to engage in all those activities in which literacy is normally assumed in his culture or group" (p. 249), although he later went on to identify 3 years of schooling as the criterion needed to reach this level. Hunter and Harman (1979) view functional literacy similarly and further stress the role of persons and groups themselves in setting criteria for what counts as functional in their lives. Finally, some researchers suggest that these many ways of defining

functional literacy point to a fundamental weakness in the concept, an "extreme elasticity of meaning" (Levine 1982) that allows for conflicting interpretations while seeming to represent widespread agreement. Further consequences of the various meanings of functional literacy include the inability to identify its specific skills and the differences in estimates of functional illiteracy in the United States (Kirsch and Guthrie 1977-78). In Levine's own definition, functional literacy is related to specific kinds of information and particular kinds of information needs. This definition, which implies shifting distinctions between illiteracy and literacy depending on task and context, suggests that all people possess some degree of functional illiteracy.

The Adult Performance Level (APL) Project (1975) shifted the concept of functional literacy to the notion of functional competency and emphasized "considerable background knowledge" and "skills beyond document literacy" (Venezky, Kaestle, and Sum 1987). APL researchers used a national survey to develop a matrix of general knowledge areas and skills and the methods to assess these competencies. From this survey, they estimated the percentage of the population who were not functionally competent for "economic and educational success in today's society" (Northcutt 1977, p. 1). Although supporters state that the underlying strength of the APL concept is its focus on "relevance, practicality, applicability and immediacy," critics have pointed out that this notion of literacy as functional competency has at its center a fundamental contradiction. It first proposes that competence is context-specific and then posits the same tasks for all persons (see, for example, James 1977).

Studies of functional literacy such as the APL and Harris surveys set the stage for more sophisticated concepts of literacy as tasks. Researchers such as Kirsch and Jungeblut (1986) have, in effect, combined notions of skills and tasks. They emphasize "the multiple nature of literacy skills and [report] profiles of people at different skill levels on different tasks" (Venezky, Kaestle, and Sum 1987, p. 15). Defining literacy as "using printed and written information to function in society, to achieve one's goals, and to develop one's knowledge and potential" (Kirsch and Jungeblut 1986, p. I-8), the National Assessment of Educational Progress (NAEP) divided literacy into three areas meant to represent the categories of literacy activities in which people are likely to engage at home, at school, and at work: prose literacy, document literacy, and quantitative literacy. The degree of difficulty of specific reading material was determined by the complexity of the task involved. Three variables--the number of features in the question that had to be matched to information in the document, the degree of correspondence between the wording in the question and that in the document, and the number of possible correct answers--were used to identify what it means to perform at particular levels on each of the scales. This notion of task is not limited to demonstrations of performance; it also seeks to capture the thinking required in the interaction among reader, task, and specific types of text.

In contrast to the NAEP tasks, which were designed to be familiar and accessible to a wide range of people, other views of literacy as tasks emphasize their context specificity. In their research on literacy in the workplace, Sticht and Mikulecky (1984) identify and base instruction on tasks specific to workplaces and workers such as Comprehensive Employment and

Training Act (CETA) word-processing trainees, wastewater plant workers, and members of the Army. They demonstrated that success on work-related materials depends on the use of specific prior knowledge and particular strategies for technical reading and problem solving.

Literacy as Practices

The third perspective on literacy emanates from social and historical examinations of literacy in different cultures. To understand the social meanings of literacy, researchers working in an ethnographic or anthropological tradition have studied what language means to its users and how it is used by them. Studies of the functions and uses of literacy in different cultural contexts reveal distinctions among literacy practices of different cultures and communities (Heath 1983; Phillips 1972; Reder and Green 1985; Taylor and Dorsey-Gaines 1988). In addressing the social, political, and economic nature of literacy practices, this model of literacy is congruent with Street's (1984) "ideological model" in which practices differ from group to group within a society as well as from society to society.

Heath's (1983) work in the Piedmont Carolinas can be seen as an exploration of the tensions between the assumptions about literacy from which middle-class teachers operate in schools and literacy practices as they appear in the homes and communities of the working-class students who attend these schools. Heath demonstrates that the different ways children learn to use language are dependent on the ways in which each community structures its families, defines the roles that community members can assume, and plays out the concepts of childhood that guide children's socialization within a particular cultural and religious milieu. Heath's work and more recently the ethnography of inner-city families by Taylor and Dorsey-Gaines (1988) provide a strong contrast to deficit models that emphasize the limited background some children (and adults) bring to learning. Instead, Heath and others (such as Reder and Green 1985) find that, although the uses of reading and writing are tied to the particular economic and cultural patterns of a community, families use literacy for a wide variety of purposes and audiences and in diverse situations.

Literacy programs, however, often fail to acknowledge these various uses. In contrast, Auerbach (1989) offers a "social-contextual" model of family literacy and asks, "How can we draw on parents' knowledge and experience to inform instruction?" (p. 177). Her suggestions, drawn from the University of Massachusetts Family Literacy Project, focus on increasing "the social significance of literacy in family life by incorporating community cultural forms and social issues into the content of literacy activities" (p. 177). These suggestions, rooted in Freirean problem posing (see next section) and whole language approaches, include co-investigations through reading and writing with adult learners into family literacy practices; community, workplace, and health care issues; and parental concerns.

Citing evidence from both historical and sociological research, Mikulecky (1990) also points to the "overwhelming influence of context on literacy purposes, demands and processes" (p. 26). The wide variations reflect our pluralistic culture and the many different social contexts in which literacy is used. Transferring literacy abilities from one context to another, Mikulecky argues, depends on similar

formats, social support networks, and knowledge of the background information needed to use literacy in another setting. Mikulecky cautions that differences in literacy use and function among different cultural groups have the potential to create situations in which the literacy of minority groups is devalued and becomes a justification for discrimination and gatekeeping. In responding to Mikulecky's perspective, Fingeret (1990) warns that respect for literacy variation as socially situated may lead to an uncritical acceptance of a normative framework with no agenda for social change. Analysis of the function and purpose of literacy activities must be done at a societal level and action taken through social policy so that issues about literacy, power, and the redistribution of power can be addressed.

Literacy as Critical Reflection

Closely linked to the perspective of literacy as practices, a fourth perspective regards literacy as a process of interpreting the world and developing a consciousness of commonly held values, behaviors, and beliefs as socially and culturally constructed. The seminal work of Paulo Freire has contributed to the growing interest in this perspective in adult literacy education. Freire sees literacy as "reading the word" in order to "read the world," that is, being able to use reading, writing, and discussion to reflect on the conditions of one's existence and ultimately to change them. Others refer to this perspective as "critical literacy," defined as the ability of people to read in order to "to decode critically their personal and social world and thereby further their ability to challenge the myths and beliefs that structure their perceptions and experiences" (Giroux 1988, p. 84). In this conception of literacy, issues of race, ethnicity, gender, social class, and history become both subjects and interpretive frames for reading and writing.

In the adult education literature, this concept of literacy is most similar to Brookfield's (1985) notion of critical reflectivity. Adult education, he argues, should focus on helping adults take control of their lives by identifying "the external sources and internalized assumptions framing their conduct" and assessing them critically. Brookfield makes a distinction between education and training. In training, previously defined skills, knowledge, and behaviors are "transmitted" to the learner. Education, by contrast, requires individuals to consider alternatives and question conventional wisdoms. This occurs through dialogue among learners and between learners and teachers. Brookfield emphasizes that an awareness of beliefs, values, and behaviors as culturally constructed leads to the possibility of individual change and collective action.

The view of literacy as critical reflection contrasts with the notion of cultural literacy, the proponents of which prescribe a body of knowledge assumed to have universal value and to be necessary for participation in this society (Bloom 1987; Hirsch 1987). Unlike critical literacy, which raises questions about what counts as knowledge and how it is generated, cultural literacy takes as given that particular texts and information are prerequisite for a shared understanding and preservation of societal values. In practice, adult educators committed to critical literacy structure classes around the exploration of significant themes and texts in learners' lives. However, the concept of cultural literacy provokes debate about the relationships between the knowledge diverse learners

bring and the choice of texts and content for literacy education.

Program evaluation and learner assessment are grounded in particular assumptions about the nature of literacy, its acquisition, development, and use. Although there is a consensus that the diversity of learners requires a similarly diverse array of options and programs, specific views of literacy have consequences for the range of opportunities available, or not available, to learners. An investigation into views of literacy held by program staff and learners may help to clarify goals, uncover discrepancies, and suggest alternatives. Such an investigation, however, may also lead to conflicts that are not easily resolved.

Educational Contexts

Learning out of School

Although many adults in literacy programs bring with them histories of failure in school, they also bring with them diverse and often quite extensive experiences using print in their daily lives and some success as learners in domains outside of school. Researchers asking questions about how the nature of learning shifts depending on context have begun to look at ways in which learning occurs both in and outside formal educational settings (Resnick 1987).

One important concept in this discussion is the distinction between acquisition and learning (Gee 1987; Krashen 1982). Acquisition is defined as the process of obtaining something without directly focusing on learning it. This occurs through "exposure to models" within the course of daily life and a "process of trial and error" (Gee 1987). Learning, on the other hand, involves "conscious knowledge gained through teaching" (Gee 1987). Learning is characterized by direct attention to explanation and analysis and to the attainment of some degree of metacognitive awareness about the item learned. Using these definitions, out-of-school literacy development might be said to be more closely aligned with acquisition, as it occurs in the contexts in which people ordinarily find themselves, and does not involve formal teaching.

In describing informal, out-of-school literacy development, Reder and Green (1985) distinguish between two types. In the first variation, individuals teach others the skills and knowledge needed to manage specific literacy tasks. Although there have been some instances of the teaching of reading and writing by one member of the community to another, the occasions for informal literacy teaching have more often occurred spontaneously in response to particular needs. In the second variation, individuals receive help within their social networks, where friends and neighbors offer to complete literacy tasks in exchange for other skills (Fingeret 1983; Reder and Green 1985). Reder and Green stress that even in situations where there is little or no direct teaching and where the person needing help does not learn to do a task as a result of the assistance, some learning about the specific social uses of literacy does occur. These studies suggest that understanding adult literacy development in particular contexts is enhanced by an understanding of the "socially organized patterns of collaboration" (Reder 1987) within a culture or community.

Resnick (1987) makes distinctions between characteristics of learning in and out of school that have implications for adult literacy programs. She argues that

getting along in the world requires a "practical intelligence" that not only differs from school learning but that may matter more in daily life. Resnick identifies four distinctions between learning in school and out:

> Briefly, schooling focuses on the individual's performance, whereas out-of-school mental work is often socially shared. Schooling aims to foster unaided thought whereas mental work outside school usually involves cognitive tools. School cultivates symbolic thinking, whereas mental activity outside school engages directly with objects and situations. Finally, schooling aims to teach general skills and knowledge, whereas situation-specific competencies dominate outside. (p. 16)

Resnick's framework emphasizes the social nature of learning out of school, the use of tools, and its context specificity.

Other research on everyday cognition (see, for example, Rogoff and Lave 1984) is exploring the relationships among cognition, culture, and context and makes a similar point: that learning in school-like settings may need to be reorganized or rethought in line with what is being learned about learning in daily life.

Programs as Settings

Most adults in the United States seeking literacy instruction have attended school, with many having completed several years of high school. Adult literacy programs differ dramatically in the extent to which they replicate the routines of prior schooling or establish new roles and expectations for learners and teachers. Some programs (and learners) may view the purpose of teaching and learning as remedying school failure and thus may concentrate the curriculum on school learning narrowly defined. Others may see their role as training adults in task-specific literacy skills, such as those required in particular workplaces. Still others may view teaching and learning as contributing to broader notions of individual and community development and may see the roles of teachers and learners as more fluid and interdependent. Some programs emphasize more than others the knowledge and experience learners bring and expect their successes as learners in other domains to contribute to their growth in literacy.

Adult literacy programs have been characterized in the literature according to different features and emphases. Hunter and Harman (1979) distinguish between conventional adult literacy programs that share the primary goal of reading development and functional programs that concentrate on the development of particular competencies or on the "functional concerns of ethnic or cultural subgroups" (p. 59). Following Hunter and Harman, others have made distinctions between program types according to their orientation and to their approaches to literacy education (Association for Community Based Education 1986; Fingeret 1984).

Fingeret (1984) categorizes U.S. literacy programs as either individually or community oriented. According to Fingeret, most programs are individually oriented; they focus on individuals' acquisition of literacy skills with the primary goal of mainstreaming into middle-class society. Community-oriented programs, on the other hand, are based on other assumptions. Offering literacy as one of a number of services geared to the needs of specific groups or communities, these

programs often reach those most economically poor and in need, those not served in large numbers by adult basic education. Individually oriented programs stress individual empowerment, according to Fingeret, whereas community-oriented programs emphasize collective development and politicized action.

Few programs fit all the features attributed to either of these program orientations. As Fingeret mentions, individually and community-oriented programs share a number of features and often have the qualities of one in the other. A multisite literacy program operated out of a school district, for example, might have within it classes and teachers resembling a community-oriented model, at the same time operating within the accountability system and implicit philosophical stance of the bureaucratic organization of which it is a part. Depending on the stance of the analyst, a particular program may be defined both as individually and community oriented. When programs participate in discussions about program types, they may uncover components in their own program that are contradictory or incongruent.

A growing number of literacy programs have been directed at literacy skills for the work force. Literacy services to employees have most often been provided through relationships with local school boards and community colleges. However, the past few years have seen the development of literacy programs integrated with work settings, creating the potential for curriculum and instruction to be derived from the literacy practices of the workplace (Business Council for Effective Literacy 1987). There has also been an increase in programs offered in workplaces by service providers; these may or may not relate directly to the on-the-job literacy needs of participants. As workplaces increasingly become the settings for literacy learning, issues about the breadth or narrowness of the curriculum, about the congruence between the goals of learners and their employers, about the effects on those unable to participate, and about the relationship between enhanced literacy and job mobility are being raised.

Cultures of Teaching

Although there is currently a heightened awareness in the United States about adult literacy learners and services, comparatively little attention has thus far been focused on the teachers and tutors working in those programs. Few in number when compared to the teachers working in primary and secondary education, these teachers and tutors, paid and volunteer, full time and part time, have been largely ignored in national or local calls for educational reform, formal teacher training, or staff development.

In part because adult literacy programs are on the margins of the educational system, the quality of teaching in them varies considerably. Many experienced instructors have been isolated from developments in the field such as new approaches to teaching and advances in research or theory. Others teach in programs part time after long days as primary or secondary school teachers, and still others teach in a literacy program for a year or two and then leave the field. Volunteers often have full-time jobs and can make only a limited commitment to their tutoring. At issue here is the degree to which the field should be professionalized and what knowledge and experience are important in teaching literacy.

Teachers and tutors often bring rich and varied experiences to their work, whether they have had any prior training specifically related to the teaching of literacy or adults. Many of these instructors have taken nontraditional routes into teaching, coming from experience and employment in human services, industry, and community organizing. Others have themselves been adult learners in literacy programs. There is considerable debate about the advantages and disadvantages of formal education and certification for this cohort of teachers, as well as about what sorts of training and orientation are realistic and appropriate for volunteers.

Adult literacy programs as workplaces exhibit some of the same problems as schools. Structures for collaborative planning and teaching are difficult to establish. Many adult literacy teachers usually meet with their classes or tutees in decentralized sites where they may rarely, if ever, see their colleagues. Their status as part-time workers creates disincentives to expand their responsibilities. Few opportunities exist to observe other instructors or to meet with teachers and learners in informal ways that play an important role in building a program community. Like elementary and secondary schools, literacy programs may need their own version of restructuring and reallocation of resources in order to further the professionalization and stability of their staff.

Community-oriented programs may experience some of these problems to a lesser extent although they also have their own concerns. To function effectively in these settings, teachers need community knowledge, background, and experience, as well as training as facilitators and advocates (Fingeret 1984). Sometimes programs are faced with helping staff to "unlearn their formal training" and adopt new behaviors and expectations appropriate to the setting. Like teachers in other types of programs, however, educators in community-oriented programs need opportunities for thoughtful reflection about their teaching and access to wider networks of ideas and practices.

Another debate in adult literacy programs involves conflicting orientations toward the roles of teachers and learners. Some regard the role of teachers of adults as primarily diagnostic: using expertise to assess skill deficiencies and prescribing appropriate sequences of instruction. Brookfield (1985), on the other hand, sees teachers as the facilitators of adult learning, the negotiators of goals, curricula, and evaluative criteria. He challenges the view of adult education where the instructor's role is to accept uncritically learners' perceptions of their own learning needs and design education to meet these needs. He stresses that this is an improvement over past models where sole authority for learning goals rested with the instructor; nonetheless, this "new orthodoxy" is potentially "apolitical" and "acurricular."

Brookfield's view is reminiscent of Freire's (1972) notion of *praxis*, in which teachers and adult learners engage in continuous and alternating processes of action and reflection. Knowledge is not fixed, adults learn as much from peers as from instructors, and a premium is placed on problem posing, risk taking and learning to deal with questions and ambiguity. Auerbach and Wallerstein (1987), in a workplace example of this model, center their teaching approach on the "shared nature" of the "conflicts and problematic interactions which enable students to envision different working conditions and fashion an individual or community response to the

problem" (p. 2). From this perspective, teaching becomes a deliberative and reflective activity (Dewey 1916; Schon 1983; Schwab 1969). In the current literature on teacher education and staff development (for example, Zumwalt 1982), the view of teaching as a reflective, intellectual activity is often contrasted with the technological view of teaching as composed of a definable repertoire of knowledge, skills, and attitudes.

Although these images of teaching and learning may be discernible in particular programs, the picture is at the same time more complex than dichotomous models would suggest. A teacher may on different occasions shift from one perspective to another. Teachers in the same program may hold quite different views. The curriculum of the program itself may reflect a range of philosophical stances.

The issues mentioned in this section on educational contexts raise a number of questions relevant to the evaluation of programs and the assessment of learners. If much significant learning occurs outside of programs, and if the nature of that learning differs from formal education, what then are the implications for creating learning environments more congruent with adults' daily experiences and for assessing that learning beyond program boundaries? Since programs differ so dramatically from each other, particularly in their relationship to specific community projects or work force requirements, strategies for program evaluation will need to respect these differences while still providing some bases for comparison. Describing the cultures of teaching and tutoring in adult literacy programs raises questions about ways to create the incentives and opportunities for teachers and tutors of adults to be learners themselves, to have professional development experiences that involve collaboration, reflection on practice, and access to theory and research.

Conclusion

This chapter has provided an overview of contrasting perspectives on adults, literacy, and educational contexts in order to provide starting places for formulating questions about program assumptions, processes, and outcomes. Many of these issues are both difficult and delicate, for they invoke inquiry into deeply held beliefs and habitual practices. Program evaluation and learner assessment are more than technical matters, and so require thoughtful discussion of a wide range of program concerns. In the next chapter are reviewed an array of publications related specifically to the design and implementation of program evaluations in different contexts. Implicit in these materials are particular views of learners, literacy, and educational contexts that demonstrate choices made by program staff and other stakeholders. The figure that follows suggests a few of the questions about adults, literacy, and educational contexts with implications for the design of evaluation and assessment.

Adults as Learners

- How is the program designed specifically for **adult** learners?
- How congruent are teachers'/tutors' and learners' concepts of success?
- What roles do adult learners and staff play in setting and revising program goals?

Concepts of Literacy

- What is the program's working definition of literacy?
- What information about the cultures, communities, and expectations of adult learners has been used to arrive at this definition?

Educational Contexts

- To what extent does the design of the program relate to adult learning in everyday life?
- Is the program more individually or community oriented?
- How does the program provide opportunities for teachers and tutors to expand their instructional repertoires?

Figure 1. Contrasting perspectives on adult literacy education: some questions for programs.

RESOURCES FOR PLANNING PROGRAM EVALUATIONS

Introduction

The purpose of this chapter is to review critically the available literature related to program evaluation in adult literacy education, showing what the pattern of work has been to date and suggesting strengths, limitations, and omissions that have implications for the further design and implementation of program evaluation in the field.

Current research as well as practical experience suggest that program evaluation can serve many purposes. An effective system of documentation and monitoring provides information to address questions raised by program staff and enables staff and administrators to plan, acquire, and maintain funding and in some cases to seek approval as a nationally validated model. Evaluation may help to ascertain if a program or group of programs merits receiving or continuing to receive financial support from a funder, or to justify the allocation of resources within a program. Critical syntheses of program evaluations, perhaps carried out by umbrella organizations, research centers, or other knowledgeable groups, may provide mechanisms for disseminating promising practices across program sites and encouraging networking.

No one system or approach to program evaluation is likely to accomplish such a wide range of purposes and serve so many different audiences. In fact, the tremendous diversity in adult learners, sites, programs, and goals makes comparability across some programs inappropriate and argues for diversity in approaches to program evaluation. As Guba and Lincoln (1981) point out, the worth of a program or practice relates to its value **in a particular context.** Evaluation designs, therefore, need to be true to the nature of the programs for which they have been developed.

Raising the awareness of program managers and staff about promising practices in evaluation is an important initial step in enhancing program quality. Based on their prior experience, some practitioners may equate program evaluation only with collecting scores and data on attendance patterns, and they accept those statistics as evidence of program success or failure. Others view those statistics as reductive, inappropriate to their program processes and goals, and even potentially threatening, depending on how the information is interpreted and used. Policy makers and funders, on the other hand, often have little access to evaluative data about programs apart from scores and demographic information, and thus little else apart from quantitative data on which to base critical decisions. All would, therefore, benefit from greater knowledge of evaluation.

A search of the literature related to program evaluation in adult literacy education yields a wide range of documents, only a few of which are actual examples of evaluations of particular programs. Many other reports, studies, and monographs, however, contain relevant and useful information, and so have been categorized in this review. These include program surveys, handbooks, instruments, and policy studies, as well as designs for multisite data collection leading to assessment and evaluation. Although many programs prepare annual reports for boards and funders, these have not been collected and analyzed here as resources for or examples of program evaluation. In addition, although every effort has been made at comprehensiveness within each category, there may be inadvertent omissions because some of this material is not accessible in libraries or through database searches. Each section characterizes the type of literature, describes the available documents of this type--their purposes, methods, and selected findings--and suggests how they might be useful in planning program evaluations.

Program Surveys

Conducted for a range of purposes and audiences, surveys of programs in adult literacy provide descriptive information about service provision. Survey methods include site visits, interviews, mail questionnaires, and audio recording of meetings; they generally conclude with some recommendations for further research, development, and/or technical assistance. Some surveys identify distinguishing features of broad types of programs and/or patterns of practice in geographical areas. In their design and findings, surveys often suggest the different meanings that "literacy" has assumed in different educational contexts. Surveys also provide information, often from practitioners' perspectives, about program goals and components and about how resources have been organized to facilitate a particular approach to teaching and learning. Thus, programs planning evaluations might consult a survey of similar programs to consider and raise questions about differences or invent other uses for program surveys beyond those originally intended.

Surveys of adult literacy programs have different purposes. Some surveys are conducted to synthesize information about programs of a particular type (for example, community- or industry-based programs) or to collect information about programs in a particular geographical area (such as a city or state). Some surveys provide detailed, program-specific information using a standardized set of descriptors across a large sample of programs in the category of that specific type (Association for Community Based Education [ACBE] 1986), whereas others synthesize and critique program data without differentiating particular programs (Chall and Heron 1986). Some describe in detail selected cases or examples (Fields, Hull, and Sechler 1987).

Some surveys are particularly useful to the field because they analyze and synthesize hard-to-obtain data. The study carried out by ACBE (1986) of community-based literacy programs is an example of this type. ACBE set out to provide a comprehensive description of programs that, many believe, represent a major direction in adult literacy education (Fingeret 1984). The goal was to describe the philosophy and practices of programs that linked education and community development in order to meet the needs of disadvantaged constituencies. (See

Fingeret 1985 for a description of community-oriented literacy programs.) The results were intended to strengthen already existing programs and to provide guidelines for individuals and organizations interested in starting new ones. In this survey, ACBE identified a number of community-based programs around the country and described some of their "unique and outstanding" characteristics, approaches, and problems. These characteristics include work with particular constituencies, institutional independence, focus on economic and social self-sufficiency, and individual and community empowerment. The survey report compares ACBE's assumptions about community-based programs with what they learned from the field. Through this survey, ACBE discovered that the use of learner-centered, participatory methods characterized many, but not all, community-based programs. Finally, ACBE learned that community-based programs have an array of outcomes but "few have time or resources to rigorously document results that occur" (ACBE 1986, p. 56).

Similar in purpose to the ACBE study but focused on a different type of literacy program, a survey of industry-based programs (Fields, Hull, and Sechler 1987) set out to identify and describe efforts designed for basic skills instruction in industry and to identify trends in their practices and approaches. Both surveys reaffirm the notion that no one system or process of program evaluation is likely to be suitable across vastly different programs.

Surveys of programs based on location often have an explicit agenda to examine instructional and policy issues in order to inform government agencies, funders, or other organizations such as colleges or universities (Chall and Heron 1986). Gadsden (1988), for example, examined the characteristics of adult literacy programs in the state of Michigan by surveying directors and coordinators, making site visits to develop a survey instrument, and designing and implementing a mail survey. Whereas the programs in Michigan cite recruitment of volunteers as their major problem, the data lead outsiders to conclude that an important concern may be finding strategies to attract more participants. Gadsden suggests that new methods of advertising, marketing, and providing services are needed; people and programs need to be "willing to go into communities and use community resources and services to attract students" (p. 161).

Designed to inform literacy policy in California, a recent survey conducted by Solorzano, Stecher, and Perez (1989) for the California State Department of Education consisted of an extensive review of the literature, a nationwide telephone survey of 63 exemplary programs, and 4 site visits. Researchers gathered data about a wide range of program features, including instructional approaches, staff development, strategies for reaching the "hard to reach," grouping practices, types of written curriculum, frequency of curriculum revision, differentiation of curriculum according to ethnicity and language, and leadership qualities of managers. Programs reported that their evaluations are based on grade-level increases, GED passing rates, retention rates, posttest scores, mastery of competencies, course completion rates, enrollment increases, and changes in self-concept. Sixty-three percent of the programs had been formally evaluated, although only 16 percent have a budget for evaluation. Community-based organizations were found to have the highest retention rates.

The report urges programs to see evaluation as a tool, not a threat. Recommendations to the state of California include coordination of services among agencies; greater sensitivity to the needs of both urban and rural communities; shared decision making among administrators, staff, and learners; provision for support services beyond literacy; and a de-emphasis on tests or any particular instructional approach. Surveys such as this one are designed to influence policy, in this case at the state level, and thus may also be considered a form of policy research.

Handbooks

In the field of adult literacy education, handbooks and manuals have been developed for a wide range of purposes and audiences. They are included in this chapter because of the questions they pose and because the components they suggest for program development can provide categories and concepts for the design of evaluations. Not included are handbooks written primarily for a local audience that usually provide some overview of the field as a prelude to describing, often eclectically, several approaches to instruction. Written to educate staff, instructors, and volunteers new to the field, these handbooks are how-to books that do not typically use theory or research in their discussions nor attempt to deal with complex issues in the field (Fingeret 1985).

More broadly based handbooks are often developed from the type of program survey described earlier and may include some synthesis of the research literature as well. In general, these fall into two types: (1) handbooks intended for literacy programs generally (Lerche 1985b; Mayer 1989) and (2) handbooks focused on a particular type of literacy program, such as workplace programs (Business Council for Effective Literacy 1987), programs for the elderly (Jacobs and Ventura-Merkel 1986), or participatory programs (Jurmo 1988). All of these handbooks aim to provide descriptive, state-of-the-art information of immediate practical value and to inform program designers and staff of the critical activities and considerations involved in setting up and administering literacy programs of various types.

Most handbooks have been developed through a process of survey research and/or field involvement and input. Lerche (1985a) provides a practitioner-oriented synthesis of the findings of the National Adult Literacy Project (NALP), a government-funded study of how literacy programs structure program operation and management to meet their objectives. Drawing on a mail survey of more than 200 "exemplary" programs as well as in-depth interviews with staff and students of 32 of these programs, the study yielded descriptive data about how programs in a wide variety of settings formulate, implement, and evaluate plans for adult literacy education. Project director of NALP, Lerche designed the survey report as a handbook for practitioners that uses the survey data as "state-of-the-art" information to offer guidance in initiating, modifying, and improving program design and operation. What the handbook does not include is current information from other sources, that is, theory and research in literacy education more generally. The extent to which the surveyed practices are congruent or incongruent with current theory is thus not addressed.

Handbooks designed for literacy programs in general assume that many programs in this country have rather similar components. For example, *Guidelines for*

Effective Literacy Programs, prepared by Mayer (1989) for B. Dalton's National Literacy Initiative, includes guidelines for relations with the community, staff resources, instruction, governance, management, and evaluation. The guidelines are intended to be used as a framework for program self-assessment. According to the author, discussion of these guidelines can help program staff and boards identify consensus and disagreements about program directions, provide inservice training, and communicate with funders and/or make grant requests. The NALP study (Lerche 1985a) describes a similar set of program components. Descriptions such as these may be used internally to identify questions and areas for evaluation. In addition, these handbooks provide external evaluators who have limited experience in the adult literacy education field with "catalogues" of how programs tend or intend to work.

Other handbooks are more clearly linked to specific philosophies or missions in the field. Jacobs and Ventura-Merkel (1986) provide a handbook for organizing a literacy program for older adults using a model in which older adults provide literacy education to their peers in community locations they frequent. The ideas are intended to be used by any organization concerned with the literacy needs of older Americans. Another handbook (Jurmo 1988) is oriented exclusively to participatory literacy education, and more specifically to participatory approaches to instruction and management. Jurmo suggests, for both professionals and volunteers, a "process by which they examine their own assumptions about participatory education, study what others have already done, and then collectively build a system for developing participatory practices within their own programs" (p. iv). The handbook proposes a set of steps through which practitioners can critically examine their own practices in relation to the efforts of others.

Several of the handbooks include sections explicitly devoted to program evaluation. The most extensive discussion is provided by Lerche (1985b), who draws on NALP data to describe reasons for conducting program evaluation, barriers to using sophisticated evaluation methods, and procedures for evaluation. In internal evaluations, Lerche points out, the director, program staff, and learners all can play a role. Four recommendations are made: (1) developing evaluation expertise through consultation with local evaluation experts; (2) defining program goals and objectives by enlisting the participation of learners, staff, and community members; (3) designing both formative and summative evaluation instruments; and (4) creating a unified system for data collection, analysis, and use.

Handbooks often contain ideas for organizing program evaluations. Mayer (1989) recommends an annual program review under the direction of the board of directors or an advisory committee. Such a review would include questions developed in consultation with learners, instructors, staff, board members, and key community constituents. Each section of the B. Dalton guidelines may be treated as a checklist of elements to consider in the review process.

Both the B. Dalton and NALP handbooks, designed for general use in the field, argue that program evaluation should be consistent with the program's mission, philosophy, and expected results. Because they begin with this assumption--that program evaluation reflects the individuality of particular program contexts--neither provides any criteria for selecting which

data to collect or how to analyze and interpret them once collected. Both handbooks assume that the program goals provide the framework within which the other components are evaluated. Although this position both reflects and respects the diversity of the field, it does not acknowledge the value of questioning the goals themselves (Fingeret 1984).

Instruments

Just a few examples of instruments for use in program self-evaluation are currently available in the literature (Lerche 1985b; Willing 1989). Arguing for well-planned, broad-based, and systematic efforts at program evaluation at the local level, Willing draws on the self-study processes institutionalized by regional accreditation bodies to design a sample evaluation tool for adaptation by individual programs. Eight program components--administration, planning, instruction, staff development, community involvement and public relations, evaluation, student services, and finances--are broken down further into elements with two to four standards written for each. The standards consist of indicators or criteria with rating scales to ascertain the extent to which the program standard is being met. The instrument is intended to be used as a starting point for programs to develop their own locally appropriate process.

Another instrument has been developed by the Division of Adult and Community Education of the Indiana Department of Public Education and piloted by the Lafayette Reading Academy (as described and reprinted in Lerche 1985b). Completed by the program administrator, the first part collects qualitative and quantitative data about goals, enrollment, seasonal attendance patterns, number of program sites, and a calculation of program impact based on a formula relating number of students attending to reasons for separation from the program. The second part of the self-evaluation is completed individually by program staff members and returned to the program administrator. It asks staff to respond to questions about nine areas of program operation, including perceptions about program direction, administration, staffing, facilities, instructional materials and processes, and assessment. The document is intended to be used as is (not adapted), and although it includes a wide range of types of items (open-ended questions, scales, checklists, and so forth), it does not include instructions for scoring and interpreting the data.

These two instruments are similar in several respects. They assume that a paper-pencil survey is a central process in evaluating literacy programs, that statistics will capture some but not all of the relevant data, and that program self-evaluation can be an informative and useful process for program planning and development. Although these instruments involve both administrators and staff in the process, neither solicits data directly from program participants or involves them in the design or revision of the evaluation instrument. Neither instrument explicitly acknowledges that differences in fundamental purposes and contexts for literacy programs may require the programs to use different components and standards.

Policy Studies

For the purpose of this review, the category of policy studies includes survey evaluations of literacy programs at the national, state, and local level designed to address broad issues related to compliance

with federal legislation, the extent and type of need for adult education services, features of program participation, and a range of program processes and impacts. For policy studies, then, the audience is more general than for the evaluations of particular programs intended to contribute directly to the decision-making processes of local stakeholders. Primarily intended to inform policy makers and federal and state officials responsible for program monitoring and management, these studies are also of interest to practitioners at the state and local level, because they place the practices of individual programs within a broader policy context. The goals, methods, and recommendations of policy studies at the national and state level thus have the potential to provide a valuable resource to the design of program evaluation at the local level.

Several studies have been conducted at the national level to assess the state-administered programs of the Adult Education Act (AEA). A study conducted for the Office of Program Planning and Evaluation of the U.S. Department of Education (Young et al. 1980), for example, was intended to fill a national gap in coherent data on local program operations. By collecting survey data from state project directors, making site visits to gather further data about and from teachers and program participants, and interviewing representatives of local agencies and organizations, the study provides an analytic description of the state programs across the nation and suggests a wide range of program characteristics and impacts that could be the focus of further investigations. In addition to such noninstructional characteristics of programs as staffing and enrollment, financial resources and expenditures, and supportive services, the evaluators looked at instruction (teacher characteristics, course content, teaching strategies and emphases, settings for instruction) and program practices from the perspectives of participants (outreach and recruitment, early withdrawal, goals and goal attainment, use of auxiliary services, and achievement and satisfaction related to teacher training and style). Eighty-one percent of adult education programs nationally were found to be administered by local school districts, 12 percent by community colleges, and the rest by vocational institutes, educational service agencies, and community-based organizations. In contrast to the Congressional emphasis on educating adults to enhance economic independence, this study indicates that state and local administrators emphasize educational and personal development goals and benefits more than goals and benefits directly related to employment.

Also at the national level, Moore and Jung (1985) use already available state-collected data to review need and impact in adult education in 12 states. In their review of previous studies, the authors pull together findings from five major formally commissioned investigations of adult education programs from 1976-1981 (including the study by Young et al. 1980). They conclude that (1) the need for adult education services considerably exceeds federal program resources; (2) the number of adults participating nationally has increased considerably since 1985; (3) adult education nationally is provided in three types of programs--ABE, adult secondary education, and ESL; (4) there are particular problems defining and targeting resources to those "most in need"; and (5) programs rely primarily on existing educational institutions. Although the quality of data collected on participant outcomes was found to vary substantially across states, causing problems in consistency, comparability, and accuracy, the

range of types of data collected was considerable. Notable among outcomes related to academic achievement and social accomplishments were programs collecting data on participants' knowledge of government and law, community services, parenting skills, economics, health care, income tax preparation, and occupations. Part of this report focuses on literacy efforts staffed by volunteers and those using existing instructional and community-based organizations. Major differences were found among state programs in their usage patterns of volunteer and private sector resources across the states.

In addition to nationally commissioned surveys of state and local programs, many states work with evaluation consultants to do extensive surveys of the range of programs funded through the AEA and state monies (Bonnet and Elston 1988; Hughes and Brannon 1988; Sherron 1986; and Snow and Bentley 1988). These evaluations are designed to assist program managers in making decisions and to provide data for the management of adult education at the state and federal levels. Intended to provide basic descriptive information, most state studies use primarily mail and telephone surveys of program directors, staff, and sometimes adult learners. They include a range of program features such as recruitment and intake, planning, characteristics of staff and participants, scheduling of services, curriculum, instruction, and assessment.

In contrast to studies relying primarily on survey data, the state of Kentucky has developed and piloted an innovative system for evaluating ABE programs within the state (Morehead State University 1987). The system involves ongoing peer evaluation using instruments developed by teachers and by the Illinois State Board of Education. After training in the philosophy of the system, 10 adult educators led 25 evaluation teams in the evaluation of 11 adult education programs throughout the state. Similar to the evaluation process used in other state programs such as teacher and administrative certification, this process has advantages to both evaluators and programs in effecting program improvements.

In their comprehensive review of national, state, and local studies on the outcomes of participation in ABE, Darkenwald and Valentine (1984) conclude that although results have not been consistent, many studies have emphasized change in self-concept as the most dramatic result. Also reported are improvements in reading and writing and some gains in employment for ABE participants. The authors point out, however, that the majority of participants enrolled for reasons of education rather than employment, a finding that raises questions about the current national emphasis on literacy education for employment and the extent to which workplace-related or job training programs can meet broader educational needs. Critical of the quality of the available research, Darkenwald and Valentine argue that more research is needed to identify the diverse outcomes for the individual participating in ABE. Their work suggests the need for policy research in basic literacy education that provides comprehensive data about reasons for enrolling in relation to learner outcomes.

Some studies of participation in ABE suggest outcomes that could be incorporated into the design of program evaluations. In their own study, Darkenwald and Valentine (1984) set out to determine the costs and benefits of New Jersey's high school completion programs, to

consider the impact of these programs in terms of student goal attainment and tangible indicators of social and economic well-being, and to design a statewide model for follow-up. Using telephone interviews and questionnaires, the study gathered participants' self-reports about employment, basic skills, self-image, participation in further education, and even parenting to provide persuasive empirical justification for continued or increased investment in the state's ABE programs. Another study, conducted in Iowa by Beder and Valentine (1987), was intended to improve ABE recruiting procedures by providing a comprehensive, descriptive analysis of the Iowa ABE population based on a carefully drawn random sample. As a policy research project, it was intended to help the state education department determine participant satisfaction and more effective recruiting methods.

Several statewide studies have been designed to inform policy making. The California Literacy Campaign Program Effectiveness Reviews (Lane et al. 1984; Wurzbacher and Yeannakis 1986) used document analysis, telephone surveys, and written questionnaires to describe program participants and identify outcomes of service. A few policy studies have focused on the implementation of particular practices, as in Solorzano and Stecher's (1987) survey conducted on behalf of the Educational Testing Service of the methods currently used by the 46 California Literacy Campaign sites to assess learner progress. Evaluators collected data from library staff, distributed a written questionnaire and visited sites. The findings provided evidence that strategies for assessing learner progress were being used but that new ones were clearly needed.

In the first phase of a longitudinal study recently conducted in New York City (Denny, Albert, and Manes 1989), researchers at the Literacy Assistance Center gathered data during 1987-1988 about the demographic characteristics of adult students in basic education and English for Speakers of Other Languages (ESOL) programs, their educational and family literacy backgrounds, their past and present participation in the labor force and public assistance programs, as well as their employment aspirations. Information was also solicited about students' motivation for attending programs and the types of accomplishments and levels of satisfaction students experience. Data were collected through individual interviews with 663 students and a mailed survey to program managers at 38 adult literacy program sites. Among the issues identified for further research and discussion were students' lack of awareness of nonliteracy services available and the delicate balance between recruiting students and having adequate places available for them to enroll. A large number of students in the study cited the "less tangible" results of participation such as increased self-confidence and "a better life," as Darkenwald and Valentine (1984) also found, lending strength to the need for additional ways to assess progress beyond standardized tests of basic skills.

The policy/evaluation research on impact of programs in ABE and adult literacy suggests a number of issues that merit further consideration. The first is that a range of program outcomes needs to be considered, although some may not be clearly specified or intended in the program goals. Furthermore, as Fingeret (1985) points out, evaluation studies in adult literacy that aim for understanding of instructional program dynamics and the perspectives of participants are very much

needed. In addition to outcomes or impact, such studies would explore the complex interactions among students, programs, and the context or environment.

Literacy Program Evaluations

In this section, four comprehensive reports are described in detail to illustrate different approaches to and purposes for evaluating adult literacy programs. These examples show how formative and summative evaluation of program implementation and impact may contribute to the development of individual programs as well as to the knowledge base in adult literacy education. In formative evaluation, the evaluator describes and tries to understand how the program is developing, the "dynamic program processes and their holistic effects on participants" (Patton 1987, p. 18). Primarily qualitative-naturalistic, these evaluations try to capture in detail the quality of the program and its strengths and weaknesses, and thus pay considerable attention to the perceptions of program staff and learners about what is going on. Summative evaluations are designed to "make basic decisions about whether a program is effective and whether it should be continued" (Patton 1987, p. 28). Summative evaluators typically report to a funding agency, government office, or program advisory board. Evaluation reports include descriptions of the program, achievement of program goals, unanticipated or related outcomes, and sometimes comparisons with other programs. Some evaluations are both formative and summative (Hikes 1988a; Koen 1986b; Koen and Musumeci 1984; Turner and Stockdill 1987). An evaluation of program implementation describes how the program operates, whereas an evaluation of impact shows the results of its activities and effects on learners.

Literacy Volunteers of New York City

Given the priorities and financial constraints faced by most adult literacy programs, it is not surprising that the literature contains few examples of program-initiated, systematic evaluation over time. The three successive studies of Literacy Volunteers of New York City (LVNYC) conducted by Matrices, Inc. in 1981-82, 1983-84, and 1985-86 (Koen 1986b; Koen and Musumeci 1984), are based on a gradually emerging set of related questions, and provide an example of external program evaluation designed with input from program staff. The studies investigated key questions related to both program implementation and impact, and in particular to instructional issues around methods and grouping patterns. The first study (1981-1982) raised a question about the impact of instruction, and more specifically, whether LVNYC program participants reached a plateau after 50 hours of instruction. The second (1983-1984) looked at internal consistency: the extent to which the instructional processes used in tutoring sessions were consistent with LVNYC's training program for tutors and its instructional philosophy. Findings showed how instructional time in individual and group sessions was being spent and depicted the respective roles of tutors and students in directing and initiating activities. It also continued to raise questions about improvement in reading abilities beyond 50 hours. The third study (1985-1986) was designed to "answer definitively" the questions about program impact raised in the two previous studies and to draw conclusions that could direct

future program planning efforts at LVNYC.

In the final report, Koen et al. concluded that LVNYC was expending most of its resources for students who were not benefiting from tutoring over time and that the agency should make other options available to students after the initial 50-hour period. In their recommendations to program directors and staff, the evaluators argued for concentration on the first instructional cycle, an increase in outreach efforts to attract more students who fit their kind of program, and the establishment of linkages with other literacy programs in New York City for referrals. The recommendations thus urged an expansion of service to new students rather than the development of services more appropriate for those who remain in the program over time.

It is not clear from the evaluation report whether these recommendations were congruent with staff perceptions of the program's goals. Furthermore, the study's findings depended on scores from standardized tests, which many consider of limited value in determining adult development in reading and writing. The 50-hour evaluation cycle may be an arbitrary time frame within which to evaluate individuals' progress. The evaluation process and report did, however, provide administrators and staff with some perspectives on their program that are not ordinarily available. The evaluation design, by focusing on instructional processes as well as outcomes, made an effort to bring these two critical dimensions into some relationship. The data gathered on what was going on in individual and group sessions, furthermore, provided information about actual practice as compared to what program planners and staff members saw as the ideal or intended instructional program.

North Carolina Adult Basic Education

The North Carolina Adult Basic Education Instructional Program Evaluation (Fingeret 1985), funded by the Division of Adult and Continuing Education, North Carolina Department of Community Colleges, aimed to provide information that could improve the effectiveness of the ABE instructional program. Part of the task was to determine the extent to which current reading research was incorporated into ABE programs in North Carolina. Understanding the "processes and dynamics" of the instructional program required a multisite case study model through which researchers could continue to raise questions as they collected and analyzed data and developed criteria and standards for interpreting the data from the perspectives of study participants. Using a distinction made by Guba and Lincoln (1981) and Scriven (1972), the study focused not on the program's merit (its intrinsic value) but on its worth, that is, the applicability of the program or practice in a specific context. To investigate worth, evaluators used the perspectives of stakeholders as a framework for analysis; for example, they collected data on crucial concepts such as "success" that stakeholders defined differently. The evaluators immersed themselves in the context and used qualitative strategies for gathering data. These included open-ended interviews and observations, as well as examination of written records, publications, and numerical data. Six programs were selected to serve as primary sites; they represented a variety of rural and urban population areas, different sizes of

student enrollment, and diversity in the extent and type of linkages.

Findings from the study show that administrators, instructors, and students have different perspectives on instruction that lead to conclusions about program leadership, programmatic decision making, recordkeeping, definitions of success, and the relationship of these programs to the state of the art. Although it is beyond the scope of this monograph to render these findings and Fingeret's recommendations in detail, describing some of these results helps to clarify what types of information can be gained from this approach and to suggest how these ideas may be applied to internal as well as external evaluations.

The North Carolina study found program personnel to be highly dedicated and the state itself well positioned with its community college system to provide effective service delivery. Yet the study argues that the program's emphasis on movement through the schooling hierarchy and the acquisition of literacy skills for individual social mobility reflect only some of the appropriate goals of adult education. Some adults seek reading and writing skills for community development and enhancement of their personal lives, both of which need to be regarded as "viable alternate routes." ABE personnel were found to emphasize nurturance, responsiveness, and good feelings more than attending to successful learning and providing leadership. Some students saw prolonged emphasis on social interaction, however, as interfering with their learning process, whereas others appeared to attend classes to meet social as well as educational needs.

Other findings indicated that programs and programmatic decisions were regarded by participants and personnel at all levels as dictated by external forces rather than created proactively by participants. Rather than considering themselves as leaders, staff tended to see themselves as "administrators, managers and responders." Dependency on commercially packaged materials and methods, Fingeret argued, indicates that instructors are not functioning as curriculum developers. Staff tended to attribute students' departure from ABE programs before meeting their own goals to external, rather than program-related, forces. Recordkeeping and data gathering were regarded as forms of accountability rather than methods for collecting information to inform program development at the local level.

Contrasting definitions of success among program constituencies provided one of the most interesting categories of findings. In the North Carolina study, success was viewed by staff in terms of enrollment, attendance, and retention (all related to funding) rather than in terms of student progress. Fingeret reported that "if students attend consistently, they are considered successes regardless of skill acquisition progress" (p. 179). Furthermore, students appeared to see a participatory role for themselves that instructors and administrators discounted. Although instructors "negotiated" goals with students to make them increasingly "appropriate," judgments of appropriateness were made by instructors who did not discuss ways to help students develop the knowledge and abilities to make these judgments for themselves. Because program organization was focused on individual mobility rather than on community development, the program remained "primarily oriented to schooling and to movement on a schooling hierarchy rather than to literacy in a broader sense" (p. 180). Fingeret cautions against limiting the evaluation of

ABE to indicators such as job acquisition or mobility, arguing that ABE be regarded as a "broad investment in the future" rather than "simply the first step in job training."

The North Carolina evaluation also explored in some depth the conceptions of reading and learning held by administrators, instructors, and students. Fingeret found limitations in programs not having a framework "within which they can analyze instructional problems, collaborate with students, or generate creative approaches to their teaching." She attributes this to a lack of pre- and inservice training and of expertise in adult education, instruction, and curriculum, as well as to the unexamined assumption that instruction of adults is basically similar to the instruction of children. Instructors tended to "identify ABE instruction with emotional rather than intellectual skill or cognitive rewards, for themselves and, in some cases, for their students" (p. 181). Fingeret found that students had internalized a phonic, subskill model of the process of learning to read and were not aware of alternative approaches to reading instruction or to learning. On the contrary, all perspectives converged on a "hierarchical subskill and social mobility model generated by the larger literate society and showing little influence by the cultural orientation, beliefs or values of the student group" (p. 12).

Throughout the report, Fingeret emphasizes the importance to programs and, by implication, to the field more generally, of maintaining the ability to question assumptions and beliefs underlying practice. She also stresses the need to examine current theory and research related to literacy instruction of adults and to engage program staff and students in ongoing inquiry. One would assume, although this is implicit rather than explicit in the author's remarks, that this would require a significant reallocation of such resources as time, materials, and staff responsibilities. Rather than assuming that adult literacy practitioners require expertise from the outside, Fingeret urges instructors to see themselves as researchers: "Instructors should see themselves as testing and refining the developing knowledge base and should be able to place their own efforts in a broader perspective" (p. 16). In our view, this would require better channels or networks that provide practitioners, often isolated, with connections to the wider field, including better access to support from professional organizations, universities, and other educational centers.

What is clear from this evaluation is that the issues in one state are not unique, that many are consistent with issues and concerns at the national level. The North Carolina study provides evidence that although instructional program evaluations may be designed to be relevant to a specific context, when richly documented and disseminated they can contribute more broadly to the knowledge base for adult literacy education.

Community-based Programs

The Association for Community Based Education recently (1989) completed a longitudinal study of nine community-based programs across the country. Intended to document program impacts, identify exemplary models and methods, and provide feedback to specific programs, the project (directed by Greg Jackson) also sought to demonstrate the feasibility of doing this type of comparative evaluation. Program administrators worked with Jackson to identify 10

learner outcomes for measurement, including reading, writing, and math skills; oral language skills; reading and writing activities outside the program context; the fostering of children's intellectual and academic achievement; community activities; self-esteem; and self-determination. Suitable instruments were found for five of these and ACBE staff developed instruments for the others. Programs selected four to seven of these outcomes for evaluation at their site.

Data were collected over a period of 9 months with changes in the measured outcomes assessed over 3 time intervals within these 9 months. Considerable effort was made to reduce the anxiety of participants and to ensure that observed differences were caused by the program rather than by other factors. Although all nine chose to have self-esteem evaluated, six of the nine programs selected reading skills to be measured and five selected writing skills. Other areas were evaluated at just a few sites where they were regarded as appropriate. The evaluators also looked at dropout and attendance patterns. Ninety-five percent of the students said they were participating in the program "to be able to do more for myself," and most reported being engaged in several forms of learning outside of classes or tutoring sessions. Jackson reports that learners were cooperative with the evaluation process although both they and their teachers found the process somewhat disruptive. The self-esteem and self-determination instruments elicited strong reactions, both positive and negative. The report indicates that program administrators appreciated the variety of outcomes available for measurement and the assistance in the documentation of program impacts that could be used for fund-raising and "identifying program weaknesses."

The ACBE study, which focused entirely on learner outcomes, provides an approach to program evaluation not available in the literature before this time, which has implications for other umbrella organizations or agencies interested in multisite program evaluation designs. Programs were found to vary widely on the different measures, including reading skills, although almost all had statistically significant impact on self-esteem. Using a range of instruments, it was possible to document some of the impact of these community-based programs and lend strength to the argument that they are effective. Because few data were collected on program processes, the study did not provide information about connections between particular features of these programs and program impacts, that is, between implementation and outcomes. Some participating program staff were critical of the use of conventional measures and expressed the wish to capture outcomes beyond basic skills areas, particularly because of the community-based nature of their programs.

The ACBE report includes an extensive discussion of the advantages and disadvantages of different aspects of this program evaluation process, and it suggests that future evaluations refine and extend this design and use case studies or ethnographies in place of, or as a complement to, these processes. Furthermore, the report recommends that financial and technical assistance be provided to literacy programs so that staff can "develop and implement their own evaluation processes" and learners can "develop and use self-assessment and participatory research processes" as well. These recommendations demonstrate ACBE's responsiveness to the feedback of program staff and understanding of program evaluation as an evolving, dialogic process. Further, this

relationship between ACBE and community-based programs serves as a model for interactive planning and evaluation between umbrella organizations and program sites. As a multisite program evaluation focused on an array of learner outcomes, the ACBE study shows how data of value to program staff and learners inside programs can be collected by outside evaluators. As this strategy of comparing programs with different emphases is revised and refined, ideas for other multisite evaluations will undoubtedly be generated.

Technology for Literacy Project

An example of an in-depth formative and summative program evaluation is provided by the Technology for Literacy Project (Turner and Stockdill 1987), a program that relies primarily on the uses of computers for adult literacy education. In this case, an evaluation design for the project was determined after the project goals were decided but before they began to be implemented. A "formative evaluator" designed systems for data collection, provided onsite advice, and conducted workshops on evaluation as part of staff training. Data were collected and analyzed during the first 2 years of the project for use by the project manager in enhancing program operations. The summative evaluation, conducted by a national expert in program evaluation, Michael Quinn Patton, was completed in the second year of the project's operation and became a formative document used in the design of year 3 goals and objectives.

The evaluation focused on direct service and addressed questions about recruitment, achievement, and retention. A second important component was training; the project was designed to train teachers, administrators, graduate students, and volunteers to incorporate technology into their programs. In addition, data were sought about incentive grants (the extent to which the center's efforts stimulated the use of technology by other programs) and research grants (the ways that the center functioned as a laboratory for research on the uses of technology with adult literacy learners). Finally, evaluators inquired into the overall strengths and weaknesses of the program and ways to build on or address them. Data collection methods included quantitative measures such as standardized achievement tests, daily logs to record time on task, and criterion-referenced tests designed by program staff. Qualitative data were gathered through group interviews, exit interviews, student questionnaires, learner activity logs, and case studies. In addition, telephone interviews and follow-up letters were used to collect data on why learners left. Learners, staff, instructors, and volunteers filled out questionnaires twice a year to identify program strengths and weaknesses. As the evaluation evolved, a cost component was added to the evaluation design to address the interests of funders. Because "project staff members were willing to collect data and learn about evaluation" (Turner and Stockdill 1987, p. 17), the evaluation process was fully integrated into the project.

The project report (written by Michael Quinn Patton) includes a full description of the summative external evaluation intended to assess independently the effectiveness of project implementation and outcomes. The report describes the implementation of each component of the Technology for Literacy Center and reports outcome gains in literacy skills and attitudes. The evaluation report emphasizes that no single indicator is sufficient

to capture the impact of the project on learners, but rather that there is a need to create an "outcomes mosaic or tapestry" and then to stand back and view the picture of program impact as a whole. That there is "no average TLC student" is reported as a "very dramatic, important and significant finding." TLC is an individualized, self-paced program serving a very diverse population of learners. Evaluators stress the importance of not placing too much emphasis on average achievement scores or average hours of participation and of avoiding the use of these averages to influence learners' expectations for their own progress. The report includes sensitive examination and discussion of issues related to attrition, progress, and completion. Attrition is related to the many obstacles, minor and major, encountered by adult learners and the resulting "irregular path of learning." Computing dropout and completion rates poses major definitional problems, the report argues. This finding raises questions about the extent to which programs can attribute attrition to factors inside or outside the program.

An extensive section of the summative evaluation report details attitudes toward the program of learners, volunteers, and professional staff. This information was collected through focus group interviews, analysis of questionnaires, and two in-depth qualitative case studies of learners. In the focus groups, learners were asked how they learned about the program, their first impressions, their reactions to using computers, what they liked and disliked about the program (for example, its location in a shopping mall), and its personal impact on them in learning to read, as well as information about their motivation to learn. The interviews with volunteers addressed questions about their training, uncovering their felt need for more than the standard materials-based training and more experience with computers. Professional staff were found to share common values and to have a strong sense of innovation. In addition, they exhibited an unusually strong commitment to helping learners document their learning and to keeping good records for program management and accountability. Findings related to the technology training component argue that despite its additional demands, these experiences contributed not only to helping others, but to making the center staff more reflective and effective.

An important feature of the design was the clear distinction made between formative and summative evaluation. Patton regards the project as a "textbook example" of "how to conduct evaluation in accordance with the standards for educational evaluation, namely, that the evaluation be useful, practical, ethical, and accurate" (Turner and Stockdill 1987, p. 24-6). Although the research component of the project has not yet been realized, its training and evaluation efforts seem to have enhanced direct services. According to Patton, the program has created a "culture of learning" that applies to both staff and students. Patton points to the positive organizational culture that makes the program "not a place for schooling, but a place for learning." As an example of a comprehensive and sophisticated program evaluation process, the Technology for Literacy Project evaluation is useful for projects with both similar and different goals and orientations. The thoroughness of the report provides much material for discussion about the relationship among program philosophy, evaluation methods, and outcomes.

Broad-based Systemic Approaches

The current literature on program evaluation in adult literacy includes a few examples of systems designed to connect related programs through information gathering, analysis, and dissemination. As resources for others who may be planning program evaluation, they illustrate different strategies for meeting the needs of diverse stakeholders and for networking programs with each other.

Many city and state systems undoubtedly have or are in the process of developing databases for adult literacy programs in different geographical areas. However, the Adult Literacy Information and Evaluation System (ALIES) in New York City is probably the largest and perhaps most sophisticated microcomputer system currently in use in the adult literacy field. Drawing on data from the four literacy-providing agencies in the city (the Board of Education, City University of New York, Community Development Agency, and the public libraries), ALIES is a uniform, citywide database that contains both program-related and individual student data coded to maintain adult learner confidentiality (Cook, Denny, and Weickert 1985; Schneider, Cook, and Schwarz 1988).

The ALIES system is designed to have four interrelated functions, although only two are actively in use at present. The first is tracking--collecting descriptive information about program implementation through numbers and demographics related to students and numbers of literacy programs and services offered (including contact and instructional hours). The second function is monitoring, or collecting information to determine the degree to which programs are meeting goals specified in their contracts (the discrepancies between the original program design and the actual program operation). These data are intended to be used by program managers and decision makers for monitoring individual programs, although their usefulness at the program level has not been studied.

The other two functions, as described in the original design for the system, are just beginning to be implemented. In the original design document, the database was also intended to be used for research and evaluation. It is unclear from the original document, however, at what level of the system the questions for this research would originate, what types of data would need to be gathered, or what role individual programs would play. The fourth function of ALIES, "in-depth investigations" of the adult literacy instructional process and the effects of instruction on individual participants and their families, is still to come.

To date, researchers at the Literacy Assistance Center working with external evaluation consultants have collected a wide range of demographic and outcome data on students in basic education and ESOL programs to study the simultaneous impact of several variables related to program effects. Although data on a wide range of independent variables are being collected, dependent variables are currently limited to scores on the standardized tests (such as the Tests of Adult Basic Education and the John Test for English for Speakers of Other Languages). There is no currently available documentation of whether these data are actually being used at the program level. Reasons for this may include the difficulties in synthesizing and reporting information from such a large database in a timely fashion and the degree to which programs

regard test scores as useful in planning and development.

In contrast to the ALIES system, which has been designed primarily for citywide monitoring, a comprehensive and innovative system designed for interactive program evaluation at local and state levels has been developed by the Massachusetts Workplace Education Project (MWEP), which included 16 sites across the state as of April 1988. The goal of the project is to strengthen the state economy by upgrading the skills of the work force and giving workers access to classes provided at the workplace that will enhance their opportunities for job advancement (Hikes 1988b). Workplace-specific curricula have been developed by all projects, although it not clear whether this was done by literacy educators alone or by educators in conjunction with workers.

The MWEP is distinctive in that its process for program evaluation not only provides extensive data about individual program functioning but links this information to the concerns of policy makers at the state level. An outside evaluation team of consultants has encouraged formative rather than summative evaluation by developing a guidebook describing critical features of successful workplace education projects and a framework for project coordinators' use in documenting the progress of their projects. Further, by interviewing workers about their participation in workplace classes, the team was able to develop educational guidelines for workplace educational projects. Recently, the research team has interviewed managers, supervisors, and union leaders, as well as workers from the previous sample, about the impact of the basic education courses on their workplace. As in other program evaluation results cited previously, increased self-esteem was the most significant outcome reported by workers of all ages. The most successful curricula, the evaluations found, responded not only to the work requirements of participants but also to their broader educational and life needs. Although difficult to quantify, the increase in the amount and quality of communication among people in the workplace has been significant.

The MWEP evaluation process has several other unique features. Programs routinely collect student assessment data using locally determined methods. When each project begins, it sets up student and program goals and reports progress to funders in a standard quarterly report format developed by the program evaluators. A central feature of the ongoing evaluation process is a representative advisory board established at each program composed of management, union representatives and/or workers, the project coordinator, and a representative from the local service delivery office. The board meets regularly to discuss the project, including workers' progress and the curriculum, and to suggest changes in project direction. Program evaluation is an ongoing process that reflects the diverse viewpoints and unique characteristics of each workplace context.

Because each workplace education project integrates data collection systematically with program functioning, a cumulative picture can be created that contributes to planning the direction of the workplace education project as a whole. The project's evaluation design includes a management information system with data entered monthly at local sites, so that they can be retrieved at the central office in Boston by members of the steering committee or the program coordinator. Although the leadership acknowledges the need for further development in specific

areas (such as learner assessment), the overall strategy for evaluation has successfully linked local program evaluation functions with overall statewide evaluation. Evaluation processes at all levels have reflected input from a broad range of stakeholders, including funders, teachers, union leaders, and company managers. The creation of a statewide profile does not constrain curriculum and assessment specific to the setting and population served. Furthermore, because the evaluation process involves collaboration among diverse stakeholders at both local and state levels, it strengthens relationships among people with different roles in the workplace and enables individual programs to be self-critical without experiencing a threat to their continuation.

Conclusion

The literature of program evaluation points to several interesting issues related to evaluating program goals, practices, and outcomes. It suggests the importance of calling into question the program goals as an essential part of the evaluation process. Rather than seeing these goals as fixed and unchangeable, program staff, learners, and others involved in the evaluation can regard the goals or mission of the program as subject to scrutiny and change. Rich data on program practices are essential for connecting outcome or impact measures with implementation. Even if an array of measures of learner progress is used, it is difficult to interpret the findings when little is known about the processes of teaching and learning within the program. Expanding the outcome measures for learner progress is also needed. Some of the studies cited in this chapter demonstrate that focusing solely on gains in reading and/or writing fails to capture unintended outcomes or other significant changes, such as learners' enhanced self-concept, increased communication among workers and managers in the workplace, community participation, reading or writing outside the program, meeting one's own objectives (such as getting a driver's license), affecting the intellectual lives of children, returning to the program as a staff member or volunteer, or participating with others in effecting social change. Furthermore, quite disparate programs can be compared if they select from a common list of alternatives those measures that best suit their own goals and purposes. Finally, other program outcomes, such as patterns of attrition and retention or staff and volunteer attitudes, need to be examined. The few examples of program evaluation that include thoughtful analyses and interpretation of such program data provide models and directions for future work in the field.

The literature reviewed lacks examples of program self-evaluation that would clearly add to an understanding of the roles that staff, managers, and learners can play in an evaluation process even without the direct assistance of outsiders. The external evaluations show how evaluators can play a variety of roles including selection and design of learner outcome measures, overall design of formative and summative plans for evaluation, as well as data collection, analysis, and interpretation. In several of the evaluations described, the process has been more or less collaborative with program staff and learners. These collaborations have served a number of purposes, among them informing programs about conducting evaluation processes and bringing to the evaluation itself the perspectives of different stakeholders. Another point concerns the benefits and drawbacks of qualitative evaluation methods. Although there is considerable evidence that

qualitative data contribute significantly to evaluation, this type of information is harder to collect and analyze. Programs may require some assistance in gathering and managing qualitative data. Finally, several of the recent program evaluations document some of the stress and dissonance created by the evaluation process (ACBE 1989; Turner and Stockdill 1987). Including data in evaluation reports about the affective responses of participants to program evaluations is educational for others. Evaluation is a learning process. Like other forms of learning, it is occasionally uncomfortable and involves risk taking and trust. By describing some of the reactions of teachers and learners to particular aspects of the evaluation, these reports provide a realistic picture of the affective dimensions of evaluation. (For a summary of approaches to program evaluation, see table 1.)

TABLE 1
APPROACHES TO PROGRAM EVALUATION

TYPES	o Single site/multisite o Formative/summative o Implementation/impact
PURPOSES	o Plan o Secure and maintain funding o Provide staff development o Improve instruction o Allocate resources o Assess research utilization o Compare perspectives of stakeholders
LEVELS	o Single program o Citywide system o State system o National
EMPHASES	o Program mission and goals o Learner experiences and outcomes o Instruction o Staff development o Culture of program as workplace o Enrollment/recruitment/retention o Grouping practices o Written curriculum o Materials utilization o Community relations and outreach o Governance and management o Financial resources and expenditures o Support services o Referral systems o Recordkeeping
METHODS	o Observation o Interviews (group and individual) o Site visits o Surveys and questionnaires o Document/statistical analysis o Logs and journals o Audio and video recordings o Case studies

LEARNER ASSESSMENT

Introduction

Through a review of the literature, this chapter describes and evaluates four major approaches to learner assessment: standardized testing, materials-based assessment, competency-based assessment, and participatory assessment. Its purpose is to assist adult literacy educators and policy makers in understanding assessment procedures currently in use and in making informed choices about selecting or constructing procedures for learner assessment.

Although its purposes, methods, and instruments vary, learner assessment can broadly be defined as a process of collecting and analyzing data provided by learners in order to make judgments about the literacy accomplishments of individuals or groups. Learner assessment comes in different forms, at different points in a learner's stay at a program; it may emphasize different views of literacy and learning and yield distinct types of information to different stakeholders. What it hopes to accomplish is wide-ranging and complex: the provision of information useful to teachers in planning instruction, to learners in determining their own progress towards particular goals, to program managers and staff in evaluating their instructional impact on learners' lives, and to funders in ascertaining a degree of program accountability and success.

Although learner assessment is clearly not the only element of program evaluation, it is nonetheless a key feature of it, of interest to program staff, learners, and funders as an indicator of a program's success. Yet, most programs have at best only limited options in selecting assessments. Choice is made difficult by a number of factors: the needs of different audiences for different types of information, requirements by many funders for particular measures, the limited number of options readily available, and the lack of accessible information about the strengths and weaknesses of different assessment approaches. Too often both the goals and processes of assessment are narrowly conceived. These limitations frequently emanate from particular concepts of literacy, learning, and teaching. As a result, entry and exit data, as well as ongoing assessments, may not provide enough direction to program staff and learners about improving the quality of the program. This is a critical problem because the processes and products of learner assessment are central to the quality of data collected for program evaluation.

This chapter draws upon a literature base that includes descriptions and samples of assessment processes and products both commercially produced and locally developed, as well as examples of assessment research, surveys of research literature related to reading measurement, and

published reviews of assessment approaches.

The review of these four approaches addresses their philosophical orientation and distinguishing characteristics, their strengths and limitations, and the criteria suggested in the literature for selecting or constructing procedures for learner assessment. Implicit in this discussion is a consideration of assessment and decision making: the degree of choice and control that program managers, staff, and learners can exercise within particular assessment approaches.

This section is divided into four parts, each covering a major assessment approach. (See table 2 for a list of features of each type.) The emphasis here on formal assessment should not be interpreted as a devaluing of the ongoing informal assessments that many adult literacy instructors, often with learners, conduct as part of the learning process. Instructors assess all the time. Although some may keep teaching logs in which they describe activities and results, all rely to some extent on the informal observations of learning that are part of the everyday life of classes and tutoring sessions. Many of the activities associated with informal assessments reappear as features of the more formal approaches described here. These activities include reading inventories, learning profiles, and writing portfolios, which rely on data provided by learners themselves about their progress over time. Assessments of progress are also conducted through conferences with learners in which instructor and learner both review the work done to date. In other conferences with instructors, learners might read aloud and then retell what has been read, thereby providing data for a type of miscue analysis of their reading. The primary audiences for these informal assessments are the instructor and learners. By providing information to the instructor about each learner and to learners themselves about what has been accomplished, these informal assessments play a critical role in motivating and involving learners, as well as in curriculum planning. Some reading researchers have called for the synthesizing and reporting of information about informal assessment procedures and data (Farr and Carey 1986). Such information would be useful for teachers and teacher educators, as well as for others involved in literacy assessment.

Standardized Testing

Many of the standardized tests of reading used in adult literacy programs are norm referenced--they measure a learner's performance relative to the performance of others who have taken the test. Even when "functional" real-world texts are used, the tasks for the reader are skill based. Most of these tests measure traditional reading components such as vocabulary and comprehension, as well as spelling and arithmetic, and they typically yield grade equivalent scores. In contrast, the ACBE (1989) program evaluation describes a standardized test of self-esteem used by some community-based organizations. Three of the standardized tests most widely used in adult literacy programs are the Adult Basic Learning Examination (ABLE), the Tests of Adult Basic Education (TABE), and the Wide-Range Achievement Test (WRAT). (See Jackson 1990 for a comprehensive review of tests for adult literacy programs.)

TABLE 2

APPROACHES TO LEARNER ASSESSMENT

	TYPE	FEATURES
I.	Standardized Testing	o Norm-referenced o Literacy as reading skills o Grade equivalent scores o Administrative usability o Cost-effective o Independent of curriculum
II.	Materials-based	o Commercially available o Related to progress in predetermined materials o Literacy as reading skills o Systems management model
III.	Competency-based	o Specific real-life tasks o Predetermined standards of performance o Competence in defined areas o Continuum of difficulty o Administered frequently for feedback and advancement o Broad range of strategies possible
IV.	Participatory	o Processes and products o Literacy as practices and critical reflection o Range of texts, tasks, and contexts o Active role of learners o Co-investigation o A form of teaching o Ongoing o Broad range of strategies possible

There are a number of reasons why standardized tests are the most widely used approach to learner assessment in adult literacy programs in the United States. Two features that make them attractive are their administrative usability (Nafziger et al. 1975) and cost-effectiveness. Standardized tests are relatively easy and inexpensive to administer; large groups of learners can take them at the same time under the supervision of few program staff. Further, relatively little training is needed to enable staff to administer the test.

The information gathered from standardized tests provides ostensibly objective information about gains over time. Easily aggregated and reported, standardized test scores are viewed as an attractive index of program functioning by funders, legislators, and government agencies. By connecting test scores to computerized management information systems (Schneider, Cook, and Schwarz 1988; Taggart 1986), managers can establish correlations between test scores and other program variables such as attendance, and umbrella organizations or funders can get a view of individual program impact relative to an entire initiative.

Standardized tests are useful in providing an indication of how someone reads, but the relation of such indications to actual reading behaviors must be inferred (Farr and Carey 1986). They provide evidence of how well someone reads from a limited perspective, under a limited set of conditions, and with a limited set of responses (ibid.). As one of a number of indicators that together provide a more complete picture of student accomplishment, test scores can contribute to the information needed to estimate learners' reading development and evaluate a program's success in achieving stated goals.

Norm-referenced standardized tests have been frequently misused to provide measures of individuals' reading ability and inform instructional decisions for individuals. Some argue (Chall 1990) that these tests are useful within the purposes they were originally designed to serve, that is, they are best used to obtain survey information, to sample groups of adults in order to determine general degrees to which people might be said to be literate.

In some cases, standardized tests function as fairly accurate predictors of success. Although a low score on a standardized test is not a good predictor of an individual learner's ability to do well on other types of reading tasks, a high score is a good indication that a learner will be able to handle different reading materials in various contexts (Sticht 1990). Further, for learners whose goal is a GED certificate or entry into an employment training program requiring a minimum test score, these tests reveal how close learners are to the accepted measure for entering these programs. As long as test scores remain the criteria for entry, the ability to achieve on tests assumes great importance.

In spite of their appeal, standardized tests have been subjected to a rigorous critique by both researchers and practitioners in adult literacy education. An in-depth review of these concerns is beyond the scope of this monograph; however, several key issues are relevant here.

The most obvious problem with standardized tests is their reliance on grade-level equivalents. When an adult is identified as reading at a 3.2 level, this denies the relevance of the abundant life experience and knowledge that adults bring to the act of learning and employ in their interpretations of texts and setting of learning

goals. An adult reader is not equivalent, therefore, to a third-grade reader. The converse is also problematic; the ability of adults to score 5.0 on a reading test provides no assurance that they would be as proficient as fifth graders in other literacy tasks (Donlon cited in Buros 1978; Sticht 1990). Further, adult learners invest these scores with disproportionate significance so that progress defined by other measures is devalued. This is particularly common in those programs where the emphasis is on testing out of the program (for example, to seek a GED certificate).

Another difficulty in the use of standardized tests involves the relation of the tests to a program's instructional model. The belief that tests identify reading levels leads directly to the placement of adults according to graded reading materials. Teaching and learning are consequently reduced to the management of adult learners' progress through predetermined sequences of these materials. Because adults are no longer in the K-12 school system and their needs for learning are very different from those of children, standardized grade-school normed tests are not useful for matching adults to instructional programs (Sticht 1990). Further, standardized tests are not designed to reveal what learners have accomplished through a program's instruction. In fact, there is often a wide gulf between the instruction provided in a program and what is assessed in a standardized test. Many programs and teachers attempt to respond to learners' goals and intentions by negotiating curricula tied to the ways in which adults use and wish to use literacy in their lives. Yet, in an effort to respond to the demands of the test, some literacy educators still feel compelled to provide practice exercises similar to what learners are likely to see on the TABE or the ABLE. Sometimes it is a struggle for learners to see the relationship between a multifaceted curriculum and progress as determined by a standardized test.

Even if these tests make sense within a program's curriculum, the process by which they are given raises questions about the validity of their results. In some cases, because of instructors' desire to minimize the negative effects of test-taking on adult learners, the conditions of test administration become less secure. They are administered under a variety of circumstances, sometimes with assistance provided to the test-taker. The same forms of the test are given many times to the same learners and are often available to them in the regular functioning of the program. Scores on standardized tests that appear objective may reflect radically different conditions of administration.

Critics of these tests raise further questions about their appropriateness for adult learners. Some have challenged the assumptions underlying the tests, for example, that a useful portrait of an adult's ability at reading can be ascertained by responses to passages read outside of a meaningful context (Hieronymus cited in Buros 1972; Hill and Parry 1988). Further, for many adults, standardized tests are closely associated with past school failure and therefore cause considerable anxiety by reinforcing a deficit model of performance in reading.

Still further, the format of standardized tests as collections of passages with questions that have single right answers demonstrates a view of reading that denies the possibility of multiple readings of texts or of texts read for a variety of purposes. Indeed, the act of taking a test requires skills beyond those being tested: learners must be familiar with test

structure and tasks in order to perform well. Sticht (1990) points out that an assumption underlying standardized tests is that in reading, skills precede knowledge. By assuming that it is possible to design tests in which prior knowledge is irrelevant to answering questions, test makers create an aura of objectivity but sacrifice validity. Finally, though few would argue for the direct evaluation of writing by standardized tests, the omission of writing suggests an implicit definition of literacy as decontextualized reading skills (Farr and Carey 1986).

Researchers and test makers are seeking to improve standardized tests. The use of cloze passages in the Degrees of Reading Power (DRP), for example, indicates a view of reading unlike that of the norm-referenced tests described earlier. The DRP reflects more current views of the reading process as the construction of meaning, although the passages to be read are still out of the context of individual readers' lives. A newer version of the TABE (1987) endeavors to reflect language and content appropriate for adults and to measure the understanding and application of conventions and principles. However, Hill and Parry (1988) argue that by including readings meant to provide higher interest to adult learners and/or to present functional situations, the writers of the new TABE confuse the test takers even further. Although the material to be read is appropriate to adults and of high interest, the items still assume that meaning is to be derived from the text, not from the knowledge and experience of the reader. Thus, it is difficult for the reader to distinguish whether literal or interpretive responses are called for (Hill and Parry 1988).

Adapting Street's (1985) theoretical distinctions, Hill and Parry (1988) suggest a shift in tests like the TABE from an "autonomous" to an "ideological" or "pragmatic" model of literacy. They suggest that the reading comprehension component of the test be divided into two sections. The section containing autonomously oriented material would concentrate on reading skills and practices thought to be useful and stable among most readers. This section could include some of the original TABE material such as tables of contents and encyclopedic material, along with material that demonstrates "how things work and how to do things" (Hill and Parry 1988, p. 56)--manuals and pamphlets that have functional importance for people but that up to now have been up absent from the TABE. The pragmatic section would include the kind of material--advertising, letters, poetry--characteristic of the new TABE (or be further divided into use of a reader's imaginative powers and common sense reasoning). In this section, the meaning would be assumed to reside not in the text but in the context that readers construct from it (Hill and Parry 1988, p. 57).

Sticht (1990) speculates that standardized tests may be improved technically through the application of item response theory (IRT), a psychometric theory that has already been applied to a number of tests including the NAEP study of literacy in young adults (Kirsch and Jungeblut 1986). IRT identifies test items and attributes to them specific characteristics. In IRT, certain factors such as item difficulty are taken into account. When considered during test development, IRT enables test constructors to have a more complete understanding of the factors that comprise test performance. IRT can also be applied to scoring and analyzing test results, producing a fairer and more accurate scale for each learner (Farr and

Carey 1986). Using IRT, NAEP is currently adapting its tests of prose, document, and quantitative literacy for wider use in developing literacy profiles of adult learners (Kirsch 1990). Critics of IRT assert, however, that separating items for analysis from their context is not appropriate. The order of test items affects response and, in the case of cloze items, is dependent upon context (Johnston 1984).

Materials-based Assessment

In materials-based assessment, learners are evaluated on the basis of tests or "check-ups" taken upon completion of a particular set of materials. Like standardized tests, this form of assessment is readily available through commercial publishers who advertise the ease of administration and systematic approach to teaching and learning. These assessments are meant to be used separately or in conjunction with standardized testing.

Probably the most popular and widespread example of the materials-based instruction/assessment approach is produced by Laubach Literacy Action (LLA), whose volunteers serve more than 700 communities in 45 states (Gadsden 1988). The materials are designed exclusively for individualized tutoring, although they have been used by other programs more eclectically. Materials used to tutor adults include self-paced and sequentially presented everyday literacy tasks (for example, writing checks, filling out applications), short readings, and phonics exercises (Rice 1983). These materials rely on a discrete skills approach to teach basic reading, writing, and listening skills at 0-5th-grade reading ability.

For the purposes of assessment, learners complete skill book check-ups administered, scored, and recorded by the tutor, who then reviews the results with learners at the following session. The objectives of the evaluation are measuring student progress in relation to the skill books, diagnosing strengths and weaknesses, and building test-taking confidence. Materials-based assessment provides the instructor and learner with information about how well the learner performed on specified tasks related to the curriculum. Although the materials stress that the check-ups are only one way to measure progress (Laubach, Krik, and Laubach 1981), no systematic assessment procedure is offered to document learners' performance or their uses of reading and writing outside the tutoring sessions.

Materials-based assessment is similar to basal reader tests for elementary school children that are administered at the end of each book and/or at the end of each unit in the book. Critics of basals maintain that the majority of postreading questions typically focus on recall of detail rather than understanding of characters' motivations and feelings; such questions do not engage readers in comprehending and appreciating what they have read. In some material there seems to be an assumption that less competent readers should be asked only the recall questions (Weaver 1988). These concerns apply as well to materials-based assessment for adults.

The materials-based approach offers another example of the "literacy as skills" perspective nested in a broader "systems management model" (Fingeret 1984, p. 31). This skills perspective is also apparent in the view of writing promulgated in the materials. Writing is defined as transcription and assessed as spelling; no allowance has been made for learners to compose their own texts, and no way of

examining those texts over time has been suggested.

The materials-based approach to assessment makes possible a close connection between curriculum and assessment. However, it creates a closed system that does not invite critical analysis of teaching processes and materials. In a materials-based approach, then, both the teaching materials and the assessment are standardized; the materials are sequenced and specified, and the assessment questions associated with the materials are the same for all learners. The notion that assessment should be closely related to the experiences of learning is a compelling one, but in such a system there is little provision for learners to direct their own study, particularly when almost all the curriculum is prepackaged or when assessment is limited to the part of the curriculum that is. The literacy activities beyond the system go unassessed and are perhaps not recognized as meaningful by learners or teachers.

Competency-based Assessment

Competency-based literacy assessment measures an adult's performance on specific real-life tasks (such as reading maps or bills) against a predetermined standard of acceptable performance (Nafziger et al. 1975, p. 37). Growth or progress is defined as the achievement of competence in defined areas. This approach to assessment is related to criterion-referenced tests that focus on how well a learner achieves on particular test objectives rather than how well a learner performs in relation to others. This movement to make assessment task oriented and relevant to learners' everyday activities began as an alternative to the more general standardized tests, which had come under criticism for being unable to address adult literacy achievement within a more functional framework (ibid.). The findings of the Adult Performance Level Project have been influential in the development of competency-based instructional programs and further competency-based assessments (Hunter and Harman 1979).

Competency-based adult education (CBAE) and assessment are distinguished from other instructional and assessment models by a number of features. In CBAE, ends or outcomes are always specified, and teaching is structured for explicit mastery of those outcomes. CBAE typically emphasizes the practical application of basic skills; to reflect this, assessment techniques vary with competencies being achieved. Proponents cite its responsiveness to the needs of adult learners. CBAE does not have time limitations nor does it require that learners come regularly to programs. It recognizes the importance of prior learning (Parker 1984, p. 108) and rewards what individuals can already do. In some cases, competencies to be achieved are decided upon collaboratively between learner and instructor.

Among the assessment strategies used in CBAE are paper and pencil tests, life experience simulations, performances, portfolios, and basic skills tests. Some competency-based assessment strategies (hands-on demonstrations of proficiency in vocational skills) are designed and criteria for evaluation set with the input of experts in the areas of competence being assessed; this ensures a connection between demonstration of that competency and how it is typically applied in a real context. Assessment is frequent, so that learners get continuous feedback and know fairly quickly when to move on, an important feature in light of the time

constraints adult learners often have (Parker 1984).

One competency program, the Central New York State External High School Diploma (EHSD), illustrates this diversity in assessment. Although not a program dealing specifically with initial literacy education, the EHSD is an innovative approach to granting adults their high school diplomas according to their accomplishments in basic skills, life skills (including consumer, scientific, citizenship and health awareness, and occupational preparedness), advanced occupational/ vocational, academic skills, and specialized skills (community organizing, art, music). Its "open testing technique" is characterized by flexibility in time and location (including take-home tests), the use of several communication modes (including oral interviews), performance demonstrations and simulated life experiences, explicit understanding and open discussion with participants of competencies to be demonstrated, continuous feedback on progress, and involvement of experts in the assessments (Nickse 1975, p. 123). This approach reflects one fundamental assumption of the program: that assessment of competencies is most valid when the test environment is as close to real contexts as possible (Alamprese 1985, p. 46).

Another example of competency-based assessment, the Comprehensive Adult Student Assessment System (CASAS), has an approach different from the EHSD. Developed under the auspices of the San Diego Community College Foundation and the CASAS Consortium (a group of 45 agencies providing ABE, ESL, and vocational ESL in the state of California), CASAS measures reading and math through life skills activities along a continuum of difficulty (CASAS 1987a,b; Rickard 1988). Its master list of competencies was developed through an assessment of California learners; individual communities using CASAS select competencies from the list that reflect the goals and concerns of their specific locale or group of learners.

Each item on a CASAS test relates directly to a functional life skill competency statement. To ensure a close relationship between these test items and tasks people accomplish in life settings, items are field-tested as reading tasks in the contexts in which they would normally be found. Items designed to assess writing competency are not yet generally available. CASAS test items have been developed and standardized for difficulty using Item Response Theory (IRT); it is therefore possible for CASAS tests to be customized to the competencies identified for particular populations.

The CASAS calibrated test item bank includes approximately 4,000 test items. The tests themselves are administered either in paper and pencil multiple-choice format or as responses to oral prompts. At the beginning levels, these test items concentrate on basic tasks needed to function in the community or in employment (CASAS 1987a,b), such as reading directions on a fire alarm box or interpreting traffic signs; at the higher levels they seek to measure basic reading from passages in contexts relevant to adults and their goals; and at more complex levels the items seek to measure critical thinking through the ways in which adults fill out complex forms or read matrices and maps. CASAS tests are standardized and yield norm-referenced scale scores, although criterion-referenced scores can be made available. The CASAS scale is divided into four levels that reflect a movement from difficulty with basic literacy and

computational skills to the ability to function at a high school/GED level. The system attempts to report learner accomplishments in ways that satisfy funders and yet still respond to learners' goals (Fingeret 1984).

The process for those using CASAS includes initial identification of basic reading and math functional skill levels through appraisal (locator) tests designed from the CASAS test item bank, development of an instructional plan (including recommendations of commercially published curriculum materials related to identified competencies), and assessment of specific competencies.

Critics raise questions about the gap between CBAE theory and much of its practice. Although a full consideration of the issues they raise cannot be included here, programs interested in adopting a CBAE approach, as well as those currently using CBAE, may find an exploration of some of these concerns useful.

In practice, some CBAE programs may operate from a limited notion of context. Unlike the NYS External High School Diploma program, "context" in other programs can refer to the material in which skills are embedded in class, rather than the setting, conditions, and purposes a particular task might have in real life. Collins (1983) notes that assessment in those programs is based on paper and pencil multiple-choice tests (and oral responses to cues) removed from competent action contextualized in the real world. Therefore, claims for competence arising out of CBAE are legitimized within its own system yet unsubstantiated in the real world. The assessment, therefore, is in most cases still a test given under the peculiar conditions of the classroom. The sole reliance in some models on paper and pencil (or computer) tests removes the key theoretical notion of "successful functioning in life roles" (Ratcliff 1983, p. 113) from the assessment process.

It has been suggested by some that CBAE carries with it the "false aura of exactness" (Collins 1983, p. 175). As with standardized tests, the appeal of competency-based assessment is based on its claims for objectivity. An adult educator interviewed by Elsa Auerbach (1986) explains:

> There's an illusion that by calling something competency-based you're removing your own prejudices from the processes of teaching and assessing--and that is a dangerous illusion. (p. 421)

Thus, competency-based assessment carries with it a set of beliefs and assumptions that are not appropriately regarded as neutral.

Others argue that a definitive assessment of competency is not possible without examining the processes involved in competent performance. Programs that rely solely on standardized tests requiring right/wrong answers are mostly unable to do this. Alternatively, some competency educators do stress the importance and value of "appraisal skills" (Monjan and Gassner 1979)--learners' metacognitive awareness of how they accomplish particular activities--and argue for including self-report on the process of accomplishment within the competency testing framework. Others have suggested a validity problem inherent in using too small a sample of behavior to establish competence (Monjan and Gassner 1979); they argue that success (or failure) in a single performance may be evidence that the skill is within the person's capacity,

but not evidence that the person can typically perform this skill.

As with materials-based assessment, critics argue that the close links between curriculum and assessment in competency-based assessment systems control and restrict teaching and learning. In some cases competencies do emerge from dialogue between instructors and learners "in which needs are identified collaboratively as a result of accumulated trust and experience, as an integral part of learning" (Auerbach 1986, p. 422). In other instances, they are established before instruction begins and tied into commercially produced teaching materials that predetermine instruction. Auerbach and Collins further question the ability of competency-based assessment systems to assess critical thinking skills; since such skills are less readily quantifiable. Fingeret (1984) adds that "increased self-worth, so highly valued by ABE program participants, cannot be reduced to a set of competencies" (p. 30).

The distinction here seems to be in whether competency approaches are viewed as instructional/assessment processes with the potential to meet specific, limited learning objectives (ibid.) or as a complete system. Systems, critics argue, circumscribe the roles of teachers and learners in establishing, pursuing, and assessing their own curriculum, and they are designed in ways that lose sight of some of the unique opportunities for contextual learning and assessment possible in competency-based education. Speaking of competency-based programs in colleges, Elbow (1986) sets some preconditions useful to apply to literacy education. First, teachers must play a major role in determining outcomes and assessment procedures rather than serve merely as the transmitters of predetermined curricula and assessments. To capture the complexity of learning, he recommends that outcomes themselves extend beyond specific functional performance objectives to be "broad and deeply intelligent, not neglecting the larger dimensions of human growth nor the special dimensions of intuition and creativity" (p. 139). Since competency-based assessment often is employed to assess the effectiveness of teaching, Elbow suggests that the feedback loop operate in both directions: that in addition to assessing teaching by the results of competency-based assessments, teaching should cast some light on the validity of stated outcomes and assessments.

CBAE educators themselves have called for improvement in assessment tools (Ratcliff 1983). In doing so educators are urged to make clear a distinction between competency-based systems (in which competencies are the starting and ending point of curriculum development and assessment) and competencies as instructional strategies, in which they are one among many in the process of enabling learners to act for change in their lives (Auerbach 1986).

Participatory Assessment

One way of understanding participatory assessment is as a process rather than a tool or set of tools, distinguished from other assessment approaches by its view of literacy and literacy education and by its emphasis on the active participation of both adult learners and program staff. Participatory literacy education is "based on the belief that learners, their characteristics, aspirations, backgrounds, and needs should be at the center of literacy instruction" (Fingeret and Jurmo 1989, p. 5). Staff in participatory programs thus

can be said to rely on the perspective brought by adult learners themselves in designing instruction, defining program identity, and collecting assessment data. Participatory assessment, then, necessitates a collaborative relationship among learners and program staff in determining the goals, texts, and contexts of assessment, as well as in judging its outcomes.

The view of literacy and literacy education within participatory assessment also reflects the centrality of the learner. This view assumes that literacy practices differ within communities and cultures and consequently are social, political, and economic in nature. Essential to this perspective is the notion that literacy has different meanings to different users (Holland 1989) and that literacy practices involve a wide range of texts, tasks, and contexts (Lytle, Brandt, and Vannozzi 1988; Lytle, Marmor, and Penner 1986; Wolfe 1988). What gets assessed, then, is not necessarily the same for each learner, but rather is determined by learners' goals and literacy needs within contexts they define.

In characterizing assessment procedures as "participatory," it is useful to widen the definition to include program staff. In contrast to systems and tests, instructors as well as learners play a role in participatory assessment. They may participate in the development of tools and strategies, formalizing for their programs the "informal" assessments previously used in individual classrooms. At the least, they are involved in dialogue with learners within the assessment process.

Learner involvement also takes different forms in participatory assessment. In contrast to the circumstances surrounding standardized testing, there is a degree of learner choice and control over what gets assessed: which pieces of work are reviewed, which materials are read and responded to. Although some work may be done during designated "data-gathering activities" (Koen 1986a), assessment is understood as deriving in part from the work already done by learners within the program as well as in other contexts in which the learner's education is likely to have had an impact. The choice of which pieces to show for assessment or which strategies to demonstrate belongs primarily with the learner. Learners, therefore, are encouraged to develop an understanding of the relationship between a literacy practice being assessed and its use in their lives outside the program. Participatory assessment further emphasizes learners' perspectives on their own learning. As a result, self-evaluation and the development by learners of metacognitive awareness--the ability to describe the ways in which they approach particular reading and writing tasks and the strategies they apply to them--play a central role.

Finally, in some instances assessment procedures are designed collaboratively by staff and adult learners; when learners play a major role in the development and refinement of strategies for teaching and assessment, the assessment becomes more fully participatory (Lytle et al. 1989). In such cases, distinctions between assessment and instruction become deliberately blurred; the process of participatory assessment becomes a co-investigation into assumptions about literacy, teaching and learning, and the nature of progress and change.

Some of the procedures and emphases of participatory assessment are similar to those in competency-based assessment and in informal, classroom-based assessments done by individual instructors. The range

of data-gathering strategies used includes paper-pencil surveys, interviews, learner-selected demonstrations of reading and writing, and collections of learners' work in portfolios. They yield both qualitative and quantitative data indicating learners' strengths and strategies rather than their needs and deficits. Assessment becomes an integral part of instruction and curriculum development and is itself a form of teaching.

Discussed here are four assessment projects that share features of the participatory approach. Because this is not a generic type of assessment, but rather a group of loosely related projects seeking to involve learners and staff in generating more complex portraits of learner accomplishment, some description of each project is necessary in order to identify features that seem to be unique to a participatory approach.

Adult Literacy Evaluation Project

One assessment process that embodies many of the features of participatory assessment is the Adult Literacy Evaluation Project (ALEP) in Philadelphia. Begun as a collaborative research project between the Center for Literacy (CFL), a not-for-profit, multisite volunteer literacy organization, and the Literacy Research Center of the University of Pennsylvania, ALEP has developed alternatives to standardized tests and grade-level descriptors in assessing growth in adult literacy.

A number of assumptions about adult learners and literacy assessment, derived by the development team from their experience as literacy researchers and practitioners, informed the development of the ALEP procedures. These beliefs reflect the philosophy of participatory education (Lytle, Brandt, and Vannozzi 1988):

- Adults come to programs with particular goals or objectives.
- Adults bring with them perceptions or beliefs about literacy and illiteracy, reading and writing, teaching and learning, that affect their success in a program.
- Assessment procedures communicate notions about literacy and about relationships between teachers and learners.
- Adult learners' expectations about learning and their own abilities may be strongly influenced by what a literacy program chooses to assess and by the particular methods used.

Through ALEP's assessment, learners and staff can identify and prioritize individual goals (make plans), describe the functions and uses of literacy in adult learners' everyday lives, determine the extent to which they are able to perform a range of reading and writing tasks and apply various strategies to them, and understand the beliefs about reading, writing, and literacy that adults bring to the learning process. All four of these dimensions--goals and plans, practices, strategies, and beliefs--are deemed essential in the project for accurately determining progress in learning over time (Lytle and Schultz 1990).

To assess adult learners when they enter the CFL program and to document change and growth over time in each of the four dimensions, staff coordinators conduct planning conferences with learners at regular intervals. Approximately a one- to one-and-one-half hour interview, the initial planning conference has four

major sections. First, to get a sense of the role of literacy in their everyday lives, learners describe the variety of contexts in which they engage in literacy practices. Then, for a record of reading and writing strategies and interests, learners choose "real-world" and CFL student-written materials to read and discuss, and they compose their own writing. Word recognition is assessed by asking learners to read signs that have been photographed in the local community. Information about concepts of literacy, reading and writing, and teaching and learning held by learners is elicited throughout the assessment of strategies and expanded through other procedures such as interviews. Texts chosen by learners are analyzed for increasing difficulty, as are the tasks involved in reading these texts. Also noted is the degree of engagement with and critical response to texts, studied through the repertoire of questions individual learners ask themselves when they read. Finally, learners assess their own priorities by responding to a checklist of goals developed from those articulated by CFL participants over the years. Learners indicate which they can already do, which are of particular interest to them, and which goals are not relevant or important to them. The process of goal setting is informed by the preceding assessment of beliefs, practices, and strategies. Later planning conferences, which may involve tutors and teachers, focus on a portfolio of accomplishments and work in progress which adults bring to the conference and analyze in collaboration with the coordinator and/or tutor or teacher.

One advantage of the ALEP assessment procedures is that they can translate directly to suggestions for tutors and teachers in planning the instructional program. The range of learners' activities and interests brought to light during the assessment is established in a dialogue between staff and the learners themselves, and so instruction can be planned to address individual aspirations and needs. The assessment itself becomes a first learning experience at CFL for entering adults, who come away with information about what is involved in becoming a more effective reader and writer and often with a broader view of the ways literacy may affect their participation in various social networks, in community activities, in jobs, and in other areas. By inviting learners into a dialogue within the assessment, programs run a lesser risk of formulating concepts of success at odds with those possessed by the learners themselves. Use of ALEP procedures provides an educational context for the collaborative investigation of adult learning and serves as one form of practitioner research. (For another example, see Wolfe 1988.)

One limitation of the original ALEP relates to tutors' participation in the process. The assessments are conducted by CFL coordinators who have more expertise than volunteer tutors in literacy education and who been trained to conduct the assessments. The coordinators must translate their results for CFL tutors who may hold differing concepts of literacy, teaching, and learning, and who might benefit from participating in or observing an ALEP assessment.

CFL has recently revised its orientation of tutors to provide them with experiences designed to help them understand and interpret the ALEP data. Another limitation of ALEP is that the information it produces is not currently quantifiable in ways that funders often require. The results may also be frustrating to adults who have been schooled into grade-level descriptors and who therefore expect

more traditional concrete "data." Others have noted that the greatest problem of such ethnographic assessment procedures might be "how to provide standardization so that the needs of a large and potentially mobile population can be provided for" (Hill and Parry 1988, p. 62).

California Adult Learner Progress Evaluation Process

An assessment process that shares some of ALEP's features is the California Adult Learner Progress Evaluation Process (CALPEP), a program of the California State Libraries/California Literacy Campaign (CLC) and the Educational Testing Service. CALPEP was initiated in order to develop a common approach to assessment in the 46 library sites (Solorzano and Stecher 1987).

The CALPEP assessment system consists of procedures for initial assessment and ongoing monitoring of learner progress, as well as semiannual tutor reports marking individual progress over a set period of time or upon exit from the program. Its audiences are the tutors and learners themselves and, twice a year, program administrators. CALPEP is process oriented and program centered. The forms were developed from information collected from tutors, coordinators, and learners at selected CLC sites. They are designed for use by tutors and learners together and are written with the learner as the primary audience (for example, "How often do you read these things outside the tutoring session?"). By noting and re-checking learners' goals, intentions, and personal assessments of ability, the greatest changes seen among adult learners in programs--shifts in goals and perceptions--are documented alongside changes noticed by the tutor and learner in learner ability at reading and writing for different purposes.

The three interview sections of the CALPEP procedures investigate learners' literacy practices. Learners describe their reading and writing habits and goals. They also comment on whether the program has helped them in work or in finding a job, and (for exit assessment) on why they are leaving the program (Solorzano and Stecher 1987). The lessons/materials pages in the Tutor/Learner Progress Log indicate an attempt to encourage tutors to plan their instruction according to the goals and progress of individual learners. Other strengths include a movement away from reporting learners' abilities in terms of grade-level equivalents and deficits toward a profile of what learners can do. In addition, CALPEP validates writing as part of literacy.

As in ALEP, the CALPEP processes are time consuming, and coordinators need training to conduct the assessments and translate their results for tutors and teachers. CALPEP's main limitations, however, concern the ways in which the theory of reading and writing underlying data analysis and reporting contradicts the learner-centered, participatory nature of the interviews and checklists. On the basis of learners' responses in the interviews, and of the work done in tutoring sessions, the tutors then define one of five reading and writing levels for each learner (for example, Level "S" in reading: can read simple sentences). These levels move linearly from "readiness" to "application" and rely on a bottom-up, skills-based view of literacy. In seeking to make their descriptive data reportable, then, CALPEP has developed a scale that is ultimately not very different from those of more traditional assessment approaches.

The model of writing presented in the CALPEP levels also assumes a linear progression moving from letters to words, to sentences, to paragraphs, although the ability of both very young and adult learners to write lengthy texts without much knowledge of skills has been well documented (for example, Kazemek 1984).

ALBSU Progress Profile

The ALBSU Progress Profile, developed by the Adult Literacy and Basic Skills Unit in Great Britain, is one example of a student progress evaluation where learner and tutor together work out aims, set goals, plan the work needed to be done, and review progress (Holland 1989). The Progress Profile is organized in two parts. The first is a form consisting of five planning questions to which learners respond periodically as aims and goals change. The second part is a progress review form, on which learners list specific goals and elements of those goals, graph their progress, and describe briefly how they have used what they have learned.

As in CALPEP and ALEP, the primary audiences for this assessment are within the program: managers, instructors, and learners. Although little documentation of its impact is currently available, instructors and learners may benefit from the Progress Profile's emphasis on accomplishment rather than deficit and its view of assessment as a reflective learning activity done by the learner with tutor support. Although no baseline data are collected, the Profile provides a clear schema for recording self-reported impact data useful to program managers in monitoring the effectiveness of instruction and in making decisions about additional resources or staff training needs (Holland 1989). This process is still in a pilot stage; further study is needed to determine whether its view of progress as a linear movement is viable and the ways in which tutors and learners might go about determining what constitutes progress for a particular literacy goal.

Student Progress Evaluations

Koen (1986a) outlines a process for organizing program-wide "student progress evaluations." This process views assessment as the periodic monitoring of learner accomplishment. At the center of this process program staff perform the following tasks (ibid., p. 12):

- Identify possible features of performance to be assessed in line with program instructional focus, philosophy, and methodologies.
- Review the list to determine priorities--to decide which areas are critical to include in student progress assessment, considering both the short-term and long-term needs of participants.
- Determine which assessment topics need to be included during the initial assessment and which ones can be incorporated into future monitoring activities.
- Consider and choose methods for conducting the assessment, keeping in mind that multiple measures make the assessment more credible.

This process emphasizes the development of procedures by programs for their own use, uses both qualitative and quantitative methods and analysis, and uses information from the assessments in instructional planning. However, it does not involve

learners in the articulation and prioritizing of assessment topics, and it relies mainly on tests for indications of reading accomplishment.

The complexity of learner accomplishment in adult literacy programs calls for a further investigation into participatory approaches. Although there are only a few examples in the literature describing these approaches, they deserve attention both for their reconceptualization of assessment and for the challenges they present in program development and evaluation.

Literacy educators seeking to design participatory assessment are faced with a number of program issues. In designing an appropriate assessment, they must examine critically the assumptions about literacy teaching and learning that inform their practice. Work on assessment, therefore, requires work on instruction and curriculum. Since participatory procedures place a great deal of the responsibility for assessment in the hands of teachers and learners, programs need to plan staff development work that assists teachers and tutors in understanding the important role assessment can play in their classes, in planning and sharing assessment/instructional activities, and in documenting changes in learners over time. The inclusion of qualitative methods in participatory assessment presents opportunities to consider the role learners can play in their own assessment: for example, in identifying their goals and purposes for literacy, in choosing materials to be read during an assessment and writings to be reviewed, or in providing self-reports of their progress in journals and in peer interviews. Finally, the kinds of data collected raise questions about how to interpret and use the data, and how to make it reportable to funders and other interested outsiders.

Conclusion

The four approaches reviewed in this chapter suggest several criteria for deciding which learner attainments to assess. Of prime importance seems to be the degree of congruence between particular approaches and a program's curricula and teaching practices. There are, however, several points of view on this issue. Some feel that the ideal circumstance occurs when a test is different from learning activities in the program and thus attempts to assess abilities or behaviors in an objective or neutral fashion. At the other end of the continuum is the view that assessment and teaching should be as closely related as possible and in some instances indistinguishable. This issue is complicated by approaches that interpret congruence as meaning that both instruction and assessment should be standardized and by the expectations learners bring to programs about what is and is not meaningful assessment. Familiar with taking standardized tests from their previous schooling, some adults find these tests extremely anxiety-producing because they are so reminiscent of previous failures. Others, however, seek validation for their progress on measures they associate with school success. A related issue is the capability of any single measure to capture the repertoire of skills and strategies an individual needs to accomplish a variety of literacy tasks. One possible solution is the development and use of multiple methods that together provide a more complex and thus more accurate portrait of learner accomplishment.

A number of important learner outcomes have only begun to be addressed in

assessment. Although various approaches assess literacy skills, tasks, and practices, only participatory approaches have the potential for assessing literacy as critical reflection. Only two of the four approaches reviewed appear to take into account the notion that assessment is both process and product: both competency-based and participatory assessments in theory provide opportunities for learners to explore and exhibit behaviors, beliefs, and practices over time. None of the approaches explicitly addresses the possibility that assessment may be conducted with groups of learners rather than just with individuals. Because most adult educators recognize the importance of the social nature of learning, many have organized their classes in ways that facilitate peer learning. Strategies for assessing these abilities and experiences would contribute to the available options. Yet the approaches that attempt to discover more about the effects of participation are also the most time-consuming, expensive, and difficult to administer and report.

A final issue that these contrasting approaches brings to prominence is that of audience. Learner assessment information is sought by a range of stakeholders, all of whom may have different requirements for the kind of information needed. It is unlikely that the data collected to inform instruction would be equally useful for describing the impact of an entire program. Standardized tests have the clear advantage of yielding quantitative data that are easily scored and aggregated. Yet because of measurement error and limitations on their use for diagnostic purposes, they are less satisfactory for describing individuals' progress and for planning programs of instruction. Tests are sometimes used quite inappropriately for determining a person's entry into employment or further education or, within programs, for placement in a specific level of materials or classes. Program staff, funders, and policy makers need to be sensitive to assessments used for gatekeeping and to recognize the obligation to provide adult learners with a variety of means to demonstrate success.

Multiple methods seem sensible, especially since many adult learners describe their literacy goals and accomplishments in ways that extend beyond narrow definitions of reading and writing. Learner assessment therefore need to be reconceptualized to reveal more of what programs and learners themselves characterize as progress or change.

IMPLICATIONS AND FUTURE DIRECTIONS

Evaluation, Assessment, and Educational Policy

How evaluations are conducted and how the findings from evaluations are used represent not only technical, but ultimately political decisions (Talmage 1982). Because there is a lack of consensus about the purposes of literacy education, and because the field is by definition pluralistic, there can be no single definition of evaluation or assessment nor one view of what makes the best program. Evaluation and assessment are therefore political because they involve choices about focus, procedure, and criteria, made by program staff, learners, sponsoring agencies, funders, and policy makers. These choices in turn lead to decisions that include, for example, whether to fund, to increase services to particular groups, or to use particular materials, and that affect the allocation and reallocation of resources. Evaluation and assessment are clearly central to policy making at all levels of the system.

As has been shown, there are different definitions of evaluation and assessment in adult literacy and a variety of models for how they should be done. In spite of this diversity, there is agreement that program evaluation and learner assessment should be useful to local program staff and learners as well as to funders and national policy makers. Faced with high rates of attrition and persistent questions such as whether those most in need of instruction are choosing to enroll in the existing programs, adult literacy educators need to join with researchers and policy makers in the exploration of innovative and forward-looking approaches to both assessment and evaluation.

Drawing on a review of the available literature related to program evaluation and learner assessment in adult literacy, and to some extent on the literature of program evaluation in education more generally, 10 critical features have been identified that together provide a framework for the evaluation of adult literacy programs and the learners who participate in them. These features and related key concepts are summarized in table 3. Although adult literacy programs share many goals and strategies with other educational initiatives for adults, adult literacy also has distinctive social, political, psychological, and educational features and thus distinctive needs for program evaluation. The framework, then, is intended specifically to enable adult literacy programs, sponsoring organizations, and policy makers to critique current evaluation practices and to plan new directions that integrate evaluation and assessment needs and functions at the local, state, and national level.

TABLE 3

CRITICAL FEATURES OF ADULT LITERACY PROGRAM EVALUATION

	FEATURES	KEY CONCEPTS
1.	External and Internal	o Participation by information users o Expertise from several sources o Building capacity of programs for self-evaluation
2.	Formative and Summative	o Evolving over time o Goal oriented o Program processes and impact
3.	Participatory	o Learners o Staff o Evaluation as inquiry
4.	Theory, Research, and Practice-Based	o Questions from all three o Making assumptions explicit o Focused on key aspects of program
5.	Critical Reflection	o Philosophy and goals o Practitioner research
6.	Teaching and Learning Processes in the Foreground	o Suited to context o Descriptive o Linking processes to outcomes
7.	Range of Learner and Program Outcomes	o Multiple indicators o Carefully selected o Broader definition of literacy
8.	Variety of Methods over Time	o Formal and informal o Formative and summative o Quantitative and qualitative
9.	Integrated with Program Functions	o Evaluation is institutionalized o Resource allocation
10.	Systematic and Systemic	o Comparable across programs o Interactive: top down and bottom up o Strategies for dissemination

A Framework for Program Evaluation and Learner Assessment in Adult Literacy Education

1. Program evaluation in adult literacy education should be conducted both externally and internally.

Programs need external and internal approaches to evaluation. Both assume participation by program managers, staff, and learners, although their roles will vary. Whether or not staff initiate an evaluation, they can still participate in its design, reflect on its findings, and use those findings to make program decisions. External evaluators offer a different perspective on the program and may bring needed expertise in evaluation methods. By working in collaboration with programs, they can develop evaluations out of stakeholders' expressed issues and needs ("utilization-focused," see Patton 1987), making it more likely that the evaluation findings will actually be used. Some have described the role of an external evaluator as an "organizational anthropologist," who seeks to understand the program from the perspectives of staff, participants, and other groups affected by the program itself (Stecher and Davis 1987). One question that arises from the literature in adult literacy program evaluation is the degree to which an external evaluator needs to be familiar with the literacy field. It is likely that those who bring an extensive background in the theory and research base of adult literacy education contribute another layer of expertise. They may be better able to organize an evaluation sensitive to the issues generally acknowledged as central for most programs, such as those related to teaching and learning.

Internal evaluation also plays a critical role. Systematic program self-evaluation enables programs to make internal policy decisions from a richer base of knowledge and from a perspective on their own program philosophy and practices. In some cases, evaluation may be conducted by an individual already employed by or associated with the program and thus already familiar with program goals and personnel. External evaluators can also assist ongoing program self-evaluation. Even a one-time external evaluation can put in place strategies for data collection, analysis, and interpretation that continue when the formal processes are completed. This is especially important for programs adopting qualitative methods for the first time. Finally, with better data collected internally, adult literacy educators, policy makers, and funders would be able to use a wider range of cross-program information in determining more confident directions for the field as a whole.

2. Program evaluation should be both formative and summative.

Adult literacy programs often provide a number of interrelated educational and support functions for participants. Thus, they require a range of strategies for formative evaluation--conducted to improve program processes--as well as summative evaluation--designed to make decisions about program effectiveness. As explained earlier, evaluation tasks may be carried out by an individual or group of people as internal or external evaluators.

Some formative evaluations are comprehensive, attempting to understand major program features and their interrelationships (Fingeret 1985). Formative evaluations are also useful when a program begins (Hikes 1988b; Turner and Stockdill 1987) or when some innovation is being implemented. They can detail practition-

ers' adaptations of their original plans and track changes in priorities over time (Patton 1987). Examples would be a revised method for tutor training, the introduction of new technology, or the development of participatory approaches to learner assessment. External evaluators in a formative evaluation see themselves as advising program planners and managers and identifying areas for improvement; they may become virtually a member of the staff for a period of time.

Although summative evaluation of program impact on learners is critical, information about outcomes without information about implementation or program processes may leave significant questions about literacy programs unanswered (ACBE 1989). Describing the key program features and activities--tutoring, classes, meetings, staff development, recruitment, planning, or counseling sessions, and gathering data from different sources--is an important part of the evaluation (King, Morris, and FitzGibbon 1987).

When programs design self-evaluation strategies, they may use the term formative to refer to the analysis and interpretation of data collected routinely over time as part of the program's system for managing and monitoring information, or they may establish procedures specifically for collecting information about a new or revised practice. Summative evaluation, conducted internally by staff and learners, with or without external consultation, may be focused on the impact of the program at particular points in time, that is, learner progress during or at the end of a specified time period or course. Because literacy programs are typically dynamic and ongoing, and because the attendance patterns of adult learners may have their own rhythms and logic, the decisions about when and how to conduct summative evaluation need to be considered carefully.

3. Program evaluation and learner assessment should involve learners and staff in a participatory process.

In a recent volume on participatory literacy education, Fingeret and Jurmo (1989) connect effectiveness with learner participation in literacy programs. In participatory programs, power is shared among learners and staff, so that learners have considerable responsibility for program decision making and operations. Learning is built on the "students' knowledge, skills and experience [which] are valued and respected" (p. 1).

Although the editors of this volume describe the participatory model as an alternative to the traditional one, and although a large number of programs in the United States are traditional, there are nonetheless compelling arguments for the participation by learners in all programs in activities related to program evaluation. Although literacy programs may differ in the extent to which learners collaborate with staff in the program design, adults themselves are clearly the most important stakeholders. Fingeret's (1985) study provides an example of what can be learned when an evaluation attempts to provide insight into both the instructional program's dynamics and the perspectives of participants.

Emphasis on program participation can be extended to include staff as well as learners. Involvement in the design and activities of evaluation by staff of literacy programs, whether professional or volunteer or both, can contribute to their own professional growth and job satisfaction. Raising questions about current practices,

determining appropriate strategies for and collecting data, meeting to analyze and interpret the information–all constitute forms of what is being called practitioner or action research. The notion of inquiry as a fundamental part of education at all levels suggests that evaluation, rather than being relegated to compliance, can strengthen a literacy program as it becomes a focus for discussion and sharing across program managers, staff, and participants (Hikes 1988b).

4. Questions for the design of program evaluation should be generated from theory, research, evaluation, and program practice.

The questions that drive program evaluations can come from current theory, research, and evaluation as well as from the problems and concerns articulated by practitioners and other stakeholders. In Fingeret's (1985) evaluation of North Carolina literacy programs, for example, one important concern was the extent to which statewide programs reflected state-of-the-art knowledge about reading and the process of learning to read. Thus, her evaluation questioned the extent to which theory and research had been integrated into program practice. Programs planning evaluation processes can consult the relevant literature–on adults as learners, concepts of literacy, and reading and writing, for example--to identify questions that have value or meaning in a specific program context. Evaluations of other literacy programs, as well as handbooks, surveys, instruments, and policy studies, provide additional ideas for questions that enable program participants to "stand outside" the program and look at what is happening.

Evaluation can also be theory based in another sense (King, Morris, and Fitz-Gibbon 1987). A theory-based evaluation focuses on program implementation and asks on what theory of instruction, learning, development, or culture the program is based. Part of the process thus involves making the implicit theoretical base of the program explicit so evaluation can then determine what activities are critical to enacting such a philosophy and whether these activities are indeed being undertaken at the program. The evaluation depends not on testimony, but rather on documentation and collection of evidence. Staff in a tutor training program, for example, may describe it as based on a particular view of literacy and learning. An evaluation of tutoring would need to include a review of training materials and visits to tutoring sessions to examine the relationship between theory as intended and actual practice (Koen 1985).

Questions that guide evaluations should focus on key aspects of the program. Johnson (1986), for example, describes evaluation designs and criteria geared specifically to the special features and goals of library-based literacy programs that may or may not provide instruction for adult learners. The ACBE survey of literacy education programs (1986) describes a set of distinguishing features that could be used to generate a set of evaluation questions geared to literacy and community involvement. The evaluation of the Technology for Literacy Project (Turner and Stockdill 1987) is based on questions about the uses of technology in individually oriented programs. Designing questions that focus on key aspects of a program may require making further distinctions within these broad categories, however. Workplace programs not only differ from other types of programs, but also from each other (BCEL 1987). The

questions that emerge from practice in specific settings will clearly differ. What seems important, though, is drawing on multiple sources for questions so that evaluating individual literacy programs occurs within a broader educational context as represented by theory, research, and evaluation.

5. Program evaluation should involve critical reflection on program philosophy and goals.

To an extent, literacy programs' goals have been shaped by federal and state funding legislation. Programs often feel that in carrying out the intentions of funders, they have little flexibility in determining their own goals. Any examination of goals at the local level by necessity may be constrained by this larger context.

The critical examination of goals at the program level nevertheless remains a priority, though not a simple matter. Although there appears to be a consensus in the literature that the process of program evaluation should begin with a clear formulation of program goals (Koen 1985; Lerche 1985a), this may not be possible or desirable. In fact, exploring different perceptions of a program's goals may need to be part of the process. Research suggests that concepts of success and definitions of literacy among diverse stakeholders (administration, teachers, learners, funders) may differ (Fingeret 1985). Part of the evaluation may involve trying to identify and understand discrepancies among different viewpoints in order to consider the implications of these differences for decision making.

A program's involvement in critical reflection on its practices entails paying attention to aspects of the program that puzzle, surprise, or raise questions about previously unexamined practices. Making certain aspects of practice "problematic" (making the familiar strange) requires deferring judgments, observing carefully, trying to understand phenomena from the perspectives of others (particularly learners), asking questions of interpretation before questions of cause and effect, and in general questioning routines in order to seek new understanding of familiar situations. As Fingeret (1985) and others have pointed out, it is extremely important that all involved in adult literacy education maintain the ability to question the assumptions and beliefs underlying practice.

Program evaluation has typically meant measuring the extent to which a program's outcomes or attainments matched predetermined measurable goals. Scriven (1972) has proposed an alternative called "goal-free evaluation" in which evaluators collect data directly on "program effects and effectiveness without being constrained by a narrow focus on stated goals" (Patton 1987, p. 36). In addition to reflecting critically on program goals, then, some or all of a literacy program evaluation can be more inductive and open to program effects that may not have been anticipated.

6. Program evaluation should give prominence to the processes of teaching and learning.

The overall goal of program evaluation is to provide a reliable description of the relationships among program processes, participants, contexts, and outcomes. To arrive at such an understanding, examination of a range of program components may be needed. Other than the observations made in the North Carolina study

(Fingeret 1985), however, there is far too little information in existing adult literacy program evaluations about the processes of teaching and learning. Tracking and monitoring students and programs are clearly important parts of program evaluation, but the interaction of different program components or functions and their impact on adult learners, cannot be understood without a close look at instruction. Although a large percentage of literacy education in the United States is carried out one-to-one by volunteer tutors, for example, there is little information about what actually occurs in tutoring sessions or about the range of approaches to tutoring and the effects of these approaches with different learners and tutors. Classes as contexts for literacy instruction are similarly undocumented.

As more and more programs develop and test curricula and instructional strategies suited to their particular contexts, careful documentation of these efforts becomes critical. Reports analyzing these data have the potential to inform policy beyond the program level. For example, research on recent efforts to develop workplace-based curricula suggest that workers' interests are often not limited to work-related learning experiences but also include literacy education related to other aspects of their lives (Hikes 1988b). Other workplace literacy programs reflect the skills and abilities needed in particular workplaces whereas still others use the workplace simply as a setting for a traditional program. Evaluation studies would contribute to a wider understanding of the most effective and responsive ways to provide workplace education. Community-based or community-oriented programs (ACBE 1986; Fingeret 1985) may also require distinctive structures for curriculum development and instruction.

Qualitative methods are particularly appropriate to an examination of the processes and practices of instruction. Through interviews and observations conducted at the program, for example, external evaluators and program staff and learners can explore the notions of teaching and learning implicit in the program, participants' own views of teaching and learning, and how different views of success are discovered and dealt with. Little is known about how views of literacy manifest themselves in instruction or about the impact of different instructional approaches on learners. These descriptions can be generated by an outside evaluation team or by staff and learners in-house, through structures that make cross-visitation, observation, and consultation possible. Such approaches yield data that contribute to a better understanding of the processes and contexts for learning. They contrast rather dramatically with, for example, testing, which fails to capture even a part of the complex interactions of the people involved in teaching and learning (Fingeret 1988).

7. Evaluations should be designed to capture a range of learner and program outcomes.

To date, program evaluation in adult literacy has been based almost entirely on learner impact or outcomes; in most cases, these outcomes have been largely determined by a limited number of indicators, including scores on standardized tests of reading and data on retention. Some programs have relied on indicators such as job acquisition or mobility; the literature contains cautions about using such indicators as the sole criteria in program evaluation (Fingeret 1984; Hikes 1988b). In Chapter 4 were discussed the range of learner outcomes typically assessed in

adult literacy programs. It is clear that outcomes for learners beyond reading gains as measured by tests merit more emphasis. The participatory approaches to learner assessment include documentation of some of these outcomes; more complex and sensitive approaches to the assessment of learner outcomes, including better tests, are currently being developed. Recent program evaluations in adult literacy (ACBE 1989; Hikes 1988a; Turner and Stockdill 1987) have also begun to investigate a wider range of learner outcomes. In these evaluations, literacy is defined more broadly to include attitudes as well as performance and oral language and technology as well as reading and writing. The emphasis is on reading and writing done in various contexts and for different purposes outside the program. Other outcomes focus on the impact of literacy education on learners' lives: encouragement of children's intellectual and academic achievement, participation in community activities, increased communication in the workplace, increased self-esteem, and increased self-determination. Although the evaluators and program staff were able to locate some standardized instruments, other methods and tools had to be developed. These included individual and focus group interviews, learner activity logs, and case studies. Evaluations that include a range of learner outcomes have the potential to produce rich and complex portraits of a program's impact, which would be of great use to programs and would also contribute to the knowledge base on adult literacy.

Examination of a range of additional program outcomes may be needed to develop a more complete understanding of program functioning. The evaluation of the Technology for Literacy Project, for example (Turner and Stockdill 1987), focused on staff and tutor outcomes and found that the project's emphasis on training teachers, administrators, graduate students, and volunteers to incorporate technology into their programs created a "culture of learning" that benefited all aspects of the program, especially direct service. Through an examination of program components and their interrelationships, the evaluation uncovered an underlying ethos that may now be intentionally enacted by the program, suggesting the importance in any program of activities for staff and learners that promote reflection and growth.

8. Program evaluation and learner assessment require a variety of methods for collecting data over time.

Methods for collecting data may be formal or informal, quantitative or qualitative; they include recordkeeping (demographics, intake, contact and instructional hours); document analysis (written statements of program philosophy, curricula, recommendations to tutors, teacher/learner journals, notes of meetings); surveys, questionnaires, and interviews, both structured and open ended (with current staff or students, former students, applicants, community members or leaders, workplace managers); and monitoring in relation to other local or national efforts (census data, local media). Some methods for gathering data about ongoing activities may involve the audio- or videotaping of teaching, tutoring, student meetings, or special events. In some evaluations, staff and evaluators may set up special meetings of tutors, teachers, and/or learners to discuss program practices (focus groups).

There are a number of ways in which time becomes a significant factor in choosing evaluation methods. In adult literacy education, course beginnings and endings

are to some extent arbitrary boundaries and do not necessarily coincide with adult learning patterns. Therefore, attention should be paid to the timing of evaluations--when they seem most sensible for the outcomes they seek to measure. Both evaluation and assessment are processes in which questions and strategies may evolve over time. Collecting data on day-to-day program activities means that the process of evaluating will be a process of discovery, a process of learning what is happening (Guba and Lincoln 1981). By implication, then, some aspects of program evaluation will be ongoing and require periodic self-correction to adapt to new information. In other words, an "evaluation of the evaluation" may take place as the process evolves. The North Carolina study (Fingeret 1985), for example, demonstrates the power of a responsive case study evaluation evolving in stages. A final issue of particular importance to conducting an evolving evaluation is the amount of program time needed to do it. If program staff and learners are to play a role, the evaluation must be practical and realistic; teaching, learning, and management cannot be interrupted. Evaluation cannot simply be added; rather, resources may have to be reallocated to enable staff to participate in evaluation as part of their daily activities.

9. To the extent possible, program evaluation and learner assessment should be integrated with program functions.

Rather than regard evaluation as a compliance activity mandated from the outside by funders or policy makers, programs can institutionalize processes that involve learners, staff, and managers in ongoing activities of collecting, analyzing, and interpreting information. These self-study processes are congruent with notions of learner participation in program design and management, as well as with current views of teacher and staff development as forms of practitioner research (Berthoff 1987; Cochran-Smith and Lytle 1990; Goswami and Stillman 1987; Johnston 1987; Kyle and Hovda 1987a,b; Lytle and Cochran-Smith 1989; Rudduck and Hopkins 1985). Program self-evaluation thus becomes an important dimension of staff development.

Integration with program functioning has another implication that needs further exploration in the field. Although the allocation of additional funding for program evaluation is needed, the reallocation of resources inside programs to include the ongoing collection and discussion of data is at least equally important. Program resources include the time of managers, staff, and adult learners as well as use of material resources such as computers and recording devices. This suggests that rather than conceive of evaluation as an option to be added at a particular point in time, literacy educators should begin to reconstruct all aspects of their programs to include it. According to organizational theory, the structure of such programs is then set up for "learning to learn" (Morgan 1986). The plan for incorporating evaluation more fully into practice needs to be realistic, however, in terms of resources and constraints.

10. Program evaluation should be systematic and systemic, enabling stakeholders to make comparisons within and across programs and contexts.

The processes and products of program evaluation need to serve a variety of

purposes and meet the needs of diverse audiences, both inside and outside the program. When internal program evaluation processes involve the systematic collection of reliable data, these results can be more readily used and compared across programs, as in the Massachusetts Workplace Education Project design currently being implemented (Hikes 1988a). Large databases (such as ALIES in New York City) have the potential to make useful city- and statewide program comparisons as well. Beyond the city and state level, national research centers, umbrella organizations, and Washington-based policy makers can play a role in coordinating program research and evaluation initiatives. The quality of the data that are collected and compared, however, is determined primarily at the local level, so that emphasis on program-centered evaluation strategies remains the foremost requirement. The integration of evaluation with programmatic functions would create the conditions for reflection on practice, critique, and informed change. There is little evidence that without knowledgeable participation at the program level, top-down monitoring can have a significant impact on the quality of educational programs.

When systems are put in place for local program evaluation (as in Hikes 1988a), stakeholders inside and outside the program can begin to communicate. More interaction among different levels of delivery systems can lead to policy informed by the realities of program practice. With richer data collected more systematically, funders and policy makers will have better information for dissemination and decision making. Interactive rather than top-down evaluation systems recognize that policy is actually made at all levels, that everyone (including teachers, tutors, program managers, and adult learners) needs more data on which to make decisions. Some different types of data will be needed at different levels, and although the designs for program evaluation will differ from site to site, there will still be a greater likelihood of comparing efforts.

Conclusion

As a synthesis of the current literature, this framework suggests directions for the field that have the potential to address the three purposes of evaluation outlined in Chapter 1.

The first purpose is **accountability**, which some studies suggest should be a "mutual" accountability in which program sponsors and funders work collaboratively with program staff and learners to design and implement systems for evaluation that are interactive and that generate meaningful data appropriate to all levels of the system. Furthermore, recent program evaluations (ACBE 1989) present models for agencies and umbrella organizations to offer evaluation as a service to programs rather than simply requesting information from them.

The second purpose for evaluation relates to the **improvement of practice.** When programs engage in activities related to evaluation and assessment, there are important consequences for their daily work. Fingeret (1984) calls for adult literacy educators to investigate their efforts more thoroughly and on an ongoing basis. Evaluation and assessment are forms of inquiry and staff development. They are similar to action or practitioner research. In the field of adult literacy, learners can take a prominent role in discussions about program design

and implementation and about staff development.

The third purpose for evaluation is the **generation of new knowledge** about adult literacy education. Program-based evaluation studies and learner assessment can promote dialogue among practitioners within and across programs and can be further enhanced by relationships with consultants and evaluators from universities. Networks formed around issues and practices of evaluation are in a position to play a critical role in setting policy. In this way practitioners and learners will have the data to support field-based positions on the purposes and impact of literacy education, and university researchers will have opportunities to work collaboratively with adult literacy educators and learners to address critical problems in the field. When new knowledge is generated through these relationships, effective dissemination of program evaluations and learner assessment becomes a priority.

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